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STIC Database Tracking Number: 168708

TO: Rei-Tsang Shiao Location: 5a10 / 5c18

Tuesday, October 18, 2005

Art Unit: 1626

Phone: 571-272-0707

Serial Number: 10 / 009324

From: Jan Delaval

Location: Biotech-Chem Library

Remsen 1a51

Phone: 571-272-2504

jan.delaval@uspto.gov

Search Notes	
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STRUCTURE FILE UPDATES: 17 OCT 2005 HIGHEST RN 865410-76-0 DICTIONARY FILE UPDATES: 17 OCT 2005 HIGHEST RN 865410-76-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

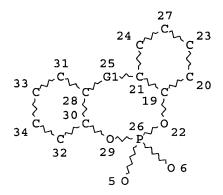
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d sta que 143 L33 STR



REP G1=(1-4) C NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

84 ANSWERS

GRAPH ATTRIBUTES: '

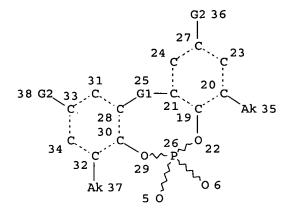
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

L35 552 SEA FILE=REGISTRY SSS FUL L33

L39 STR



REP G1=(1-4) C
VAR G2=H/AK
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M4 C AT 35
ECOUNT IS M4 C AT 37

GRAPH ATTRIBUTES:

RSPEC 27

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L41 177 SEA FILE=REGISTRY SUB=L35 SSS FUL L39

L42 SCR 1918

L43 84 SEA FILE=REGISTRY SUB=L41 SSS FUL L42

FULL SUBSET SCREEN SEARCH COMPLETED

SEARCH TIME: 00.00.01

=> d his

L1

(FILE 'HOME' ENTERED AT 13:45:16 ON 18 OCT 2005) SET COST OFF

FILE 'HCAPLUS' ENTERED AT 13:45:27 ON 18 OCT 2005

1 S (WO2000-JP3912 OR JP99-168864)/AP,PRN

E TAKAHASHI/AU

L2 9 S E3

E TAKAHASHI K/AU

L3 1801 S E3-E11, E41

E TAKAHASHI M/AU

L4 2069 S E3-E7, E128-E130

E TAKAHASHI S/AU

L5 953 S E3-E6, E87

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E TAKAHASHI T/AU
L6
           2287 S E3-E10
                E TAKAHASHI TET/AU
L7
            321 S E20
                E MASAYUKI/AU
              3 S E3, E47
L8
                E TETSUYA/AU
              3 S E3
L9
              3 S E44,E49
L10
                E KAORI/AU
                E SAYURI/AU
                E HARUNA/AU
             54 S E83,E95
L11
                E TOHRU/AU
         136308 S (ASAHI? OR DENKA? OR KOGYO?)/PA,CS
L12
L13
           1313 S (NUCLEAT? (L) AGEN?)/CW, CT
                E NUCLEATING AGENT/CT
                E E4+ALL
          21615 S E2+OLD, NT
L14
            776 S E13+OLD, NT
L15
L16
            776 S E16+OLD, NT
                E CRYSTAL NUCLEAT/CT
                E E5+ALL
          2344 S E2+OLD, NT
L17
L18
          15029 S E5+OLD, NT
L19
            21 S L1-L11 AND L13-L18
L20
            119 S L12 AND L13-L18
L21
              8 S L19 AND L20
L22
             21 S L19, L21
              8 S L22 AND ?PHOSPH?
L23
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     FILE 'HCAPLUS' ENTERED AT 13:54:14 ON 18 OCT 2005
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L24
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                                  51 TERMS
                SET SMARTSELECT OFF
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L25
             51 S L24
L26
             19 S L25 AND P/ELS AND NR>=3
             15 S L26 NOT SPIRO
L27
             5 S L27 AND C29H43O4P
L28
             1 S L28 AND 1/NC
L29
             21 S 106396-29-6/CRN
L30
L31
             22 S L28-L30
L32
             32 S L27, L31
L33
                STR
L34
             31 S L33
L35
            552 S L33 FUL
                SAV L35 SHIAO9304/A
L36
            345 S L35 AND (C6-C6-OPOC5 OR C6-C6-OPOC6 OR C6-C6-OPOC7 OR C6-C6-O
L37
            207 S L35 NOT L36
L38
                STR L33
L39
                STR L38
L40
              9 S L39 SAM SUB=L35
L41
            177 S L39 FUL SUB=L35
                SAV L41 SHIAO9304A/A
L42
                SCR 1918
L43
             84 S L42 FUL SUB=L41
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L44
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L45
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L46
L47
             13 S L44 NOT L45
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L49
             22 S L29, L49
L50
             11 S L32 NOT L50
L51
L52
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L53
             67 S L51, L52
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L54
            374 S L35 NOT L41, L50, L53, L54
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L56
L57
            112 S L53
L58
            63 S L54
L59
             89 S L55
L60
            213 S L13-L18 AND L56
L61
             40 S L13-L18 AND L57
L62
             5 S L13-L18 AND L58
             4 S L13-L18 AND L59
L63
L64
            232 S L60-L63
            143 S L64 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
L65
L66
            34 S L65 AND RESIN?
L67
            137 S L65 AND PLASTIC?/SC,SX
L68
             49 S L65 AND PLASTIC?/CW,CT
L69
             34 S L66 AND L67, L68
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L71
              6 S L70 AND C29H43O4P
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L72 .
            412 S L71
L73
            286 S L72 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
L74
             62 S L73 AND RESIN?
L75.
            244 S L73 AND PLASTIC?/SC, SX, CW, CT
L76
             59 S L74 AND L75
L77
             67 S L1-L12 AND L72
             48 S L77 AND L73
L78
             42 S L78 AND L74-L76
L79
             88 S L76,L79
L80
L81
             85 S L80 AND P/DT
             11 S L81 AND US/PC, PRC, AC
L82
             59 S L80 AND L74
L83
             59 S L83 AND P/DT
L84
             10 S L84 AND US/PC, PRC, AC
L85
L86
             15 S L1-L11 AND L73
L87
             69 S L76, L86
     FILE 'REGISTRY' ENTERED AT 14:20:03 ON 18 OCT 2005
=> d ide can tot 171
L71
     ANSWER 1 OF 6 REGISTRY COPYRIGHT 2005 ACS on STN
RN
     327029-72-1 REGISTRY
ED
     Entered STN: 14 Mar 2001
CN
     12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-
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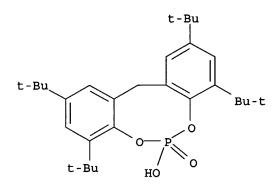
dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt, hydrate (2:5) (9CI) (CA INDEX NAME)

MF C29 H43 O4 P . 5/2 H2 O . Na

SR CA

LC STN Files: CA, CAPLUS

CRN (106396-29-6)



Na

●5/2 H₂O

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:194092

L71 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2005 ACS on STN

RN 327029-71-0 REGISTRY

ED . Entered STN: 14 Mar 2001

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt, monohydrate (9CI) (CA INDEX NAME)

MF C29 H43 O4 P . H2 O . Na

SR CA

LC STN Files: CA, CAPLUS

CRN (106396-29-6)

● H₂O

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:194092

L71 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2005 ACS on STN

RN 170020-82-3 REGISTRY

ED Entered STN: 10 Nov 1995

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt, dihydrate (9CI) (CA INDEX NAME)

MF C29 H43 O4 P . 2 H2 O . Na

SR CA

LC STN Files: CA, CAPLUS

CRN (106396-29-6)

●2 H₂O

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 123:301507

L71 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2005 ACS on STN

RN 151367-62-3 REGISTRY

ED Entered STN: 19 Nov 1993

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 1,4,8,11-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

MF C29 H43 O4 P . Na

SR CA

LC STN Files: CA, CAPLUS

CRN (698969-74-3)

● Na

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 124:234000

REFERENCE 2: 119:251812

L71 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2005 ACS on STN

RN 146106-41-4 REGISTRY

ED Entered STN: 24 Feb 1993

CN Silicic acid, magnesium salt, mixt. with 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-12H-dibenzo[d,g][1,3,2]dioxaphosphocin 6-oxide sodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt, mixt. contg. (9CI) OTHER NAMES:

CN ADK-ARKLS F 85

MF C29 H43 O4 P . Na . Unspecified

CI MXS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 85209-91-2 (106396-29-6) CMF C29 H43 O4 P . Na

Na

CM 2

CRN 1343-88-0 CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

6 REFERENCES IN FILE CA (1907 TO DATE)

6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:454365

REFERENCE 2: 136:12858

REFERENCE 3: 124:101894

REFERENCE 118:244639 4: REFERENCE 118:202139 118:113226 REFERENCE 6: L71 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2005 ACS on STN RN 85209-91-2 REGISTRY ED Entered STN: 16 Nov 1984 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-CN (CA INDEX NAME) dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) OTHER NAMES: 2,2'-Methylenebis(4,6-di-tert-butylphenol) phosphate sodium salt CN CNADK 11 CN ADK Stab NA 11 ADK Stab NA 11SF CN ADK Stab NA 11UF CN ADK Stab NA 11UH CN ADK Stab NA 11UY CNAmfine NA 11 CNCN Mark NA 11 Mark NA 11UF CN NA 11 CN NA 11UF CN NA 11UH CNNA 11UY CNCNNA 40 CNNA 40 (nucleating agent) Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate CN 104149-35-1, 118569-25-8 DR MF C29 H43 O4 P . Na COM CI SR European Union (EU) BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CBNB, CHEMLIST, LC STN Files: CIN, PROMT, TOXCENTER, USPAT2, USPATFULL EINECS**, NDSL**, TSCA** Other Sources: (**Enter CHEMLIST File for up-to-date regulatory information) CRN (106396-29-6)

Na

404 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

404 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1: 143:307083 REFERENCE REFERENCE 2: 143:287244 REFERENCE 3: 143:287104 REFERENCE 4: 143:270967 REFERENCE 143:252454 REFERENCE 143:231217 REFERENCE 7: 143:231091 REFERENCE 8: 143:174018 REFERENCE 9: 143:173662

REFERENCE 10: 143:116673

=> fil hcaplus

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FILE COVERS 1907 - 18 Oct 2005 VOL 143 ISS 17 FILE LAST UPDATED: 17 Oct 2005 (20051017/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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Korean

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ANSWER 1 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
L87
     2004:845366 HCAPLUS
AN
     142:23972
DN
     Polyamide resin composition
ΤI
IN
     Lee, Byung Jin
PΑ
     Hyundai Motor Company, S. Korea
SO
     Repub. Korea, No pp. given
     CODEN: KRXXFC
DT
     Patent
```

FAN.CNT 1

PATENT NO. APPLICATION NO. KIND DATE DATE ------------------------PΤ KR 158079 B1 19990115 KR 1995-29133 19950906 <--PRAI KR 1995-29133 19950906 <--

AB A polyamide resin composition is provided which has superior mech. strength and resistance against gasoline in the engine room. The polyamide resin composition, into which glass fiber and organic nucleating agent are added, comprises 25-60% glass fiber and 0.03-1.0% organic nucleating agent against 100% polyamide resin. The polyamide resin comprises 60-70% polyamide-6 resin having 2.2-2.8 relative viscosity, 20-30% polyamide-6 resin having 3.2-3.6 relative viscosity, and 3-10% polyamide-6,6 resin having 2.5-3.5 relative viscosity. The length of glass fiber is 3 mm and its diameter is 10-15 µm. Sodium 2,2'-methylene bis(4,6-di-tert-butylphenyl)phosphate and sodium di(4-tertiary-butylphenyl)phosphate are the most suitable as the organic nucleating agents.

IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-

butylphenyl)phosphate

RL: MOA (Modifier or additive use); USES (Uses)

(crystal nucleating agents; in polyamide gasoline-resistant composition useful for engine room)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 2 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:820999 HCAPLUS

DN 141:296788

TI Resin composition for automobile delivery pipes

IN Lee, Byung-Jin; Ko, Dong-Whee

PA Kolon Ind. Inc., S. Korea; Hyundai Motor Company

SO Repub. Korea, No pp. given

CODEN: KRXXFC

DT Patent

LA Korean

FAN.CNT 1

 PRAI KR 1994-12481 19940603 <--

AB The compns., having reduced weight, good phys. properties, mech. strength and gasoline resistance, useful for fuel distribution pipe among peripheral components of automobile engine, comprise 100 parts nylon-6 resin or nylon-66 resin, 30-60 parts glass fiber and 0.01-0.5 parts phosphate-based nucleating agent, e.g., sodium di(4-t-butylphenyl)phosphate or sodium 2,2'-methylenebis (4,6-di-t-butylphenyl)phosphate.

IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl)phosphate

RL: MOA (Modifier or additive use); USES (Uses)

(crystal nucleating agent; resin composition useful for automobile fuel distribution pipes)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 3 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:324490 HCAPLUS

DN 134:327234

TI Granular composite additives for polyolefins and their manufacture

IN Takahashi, Masayuki; Kono, Toshinori; Takeuchi, Takashi

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 2001123021 A2 20010508 JP 1999-303821 19991026 <-PRAI JP 1999-303821 19991026 <--

The additives comprise alkali metal 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphates dispersed in phenol antioxidant matrixes and optionally ≥1 other additives dispersed and/or dissolved in matrixes. Thus, 100 parts polypropylene (H 700) and 1 part pellets containing sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate 11, tetrakis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionyloxymethyl]methane 25, and tris(2,4-di-tert-butylphenyl) phosphite 49 parts showed Haze 31.3% and flexural modulus 1509 MPa.

IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate

RL: MOA (Modifier or additive use); USES (Uses)

(manufacture granular composite additives for polyolefins)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 4 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:270493 HCAPLUS

DN 134:296902

TI Propylene resin-based compositions for container lids with good moldability, and high rigidity and impact resistance

IN Kawai, Shigenobu; Okumura, Shogo; Kobayashi, Tatsuo

PA Nippon Polychemicals Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PI

	01.1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2001106843	A2	20010417	JP 1999-288857	19991008 <
ΔТ	.TD 1999-288857		19991008	/	

AB The title compns. comprise: (A) propylene-based resin 100, (B) one or two polymers 3.0-15, (C) a crystal nucleation agent 0.01-1, and (D) a TiO2 pigment 0.1-7 parts, wherein B is either prepared by metallocene catalysts, have MFR 0.1-50 g/10 min, or is an ethylene-containing polymer having the highest peak temperature 15-85° from the high-temperature GPC elution curves. Thus, mixing and kneading the mixture of BC 3B (polypropylene) 100, Kernel KS 560 (a B polymer) 5, Tipaque CR 80 (TiO2) 1.0, NA 11 (a C component) 0.2 parts and other necessary additives gave a title composition, which was molded to drinking container covers with good claimed properties.

IT 85209-91-2, 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin,

2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt RL: MOA (Modifier or additive use); USES (Uses)

(NA 11, crystal nucleating agent; propylene resin-based compns. for container lids with good moldability, rigidity and impact resistance)

85209-91-2 HCAPLUS RN

12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-CN dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

ANSWER 5 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN L87

2001:270492 HCAPLUS AN

DN 134:296901

TIPropylene resin-based compositions for container lids with good moldability, rigidity and impact resistance

IN Kawai, Shigenobu; Okumura, Shogo; Kobayashi, Tatsuo

PA Nippon Polychemicals Co., Ltd., Japan

so Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

Japanese LA

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2001106842	A2	20010417	JP 1999-288856	19991008 <
PRAI	JP 1999-288856		19991008	<	

AB The title compns. comprise: (A) propylene-based resin 100, (B) fluoropolymer, having mol. weight 2,000,000-15,000,000, 0.05-3, (C) a crystal nucleation agent 0.01-1, and (D) a TiO2 pigment 0.1-7 parts. Thus, mixing and kneading the mixture of BC 3B (polypropylene) 100, Fluon CD 1 (a PTFE powder having mol. weight 3,000,000) 0.05, Tipaque CR 80 (TiO2) 1.0, NA 11 (a C component) 0.2 parts and other necessary additives gave a title composition, which was molded to drinking container covers with good claimed properties.

IT 85209-91-2, 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt RL: MOA (Modifier or additive use); USES (Uses)

> (NA 11, crystal nucleating agent; propylene resin-based compns. for container lids with good moldability, rigidity and impact resistance)

RN85209-91-2 HCAPLUS

CN 12H-Dibenzo [d, q] [1,3,2] dioxaphosphocin, 2,4,8,10-tetrakis (1,1dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

) Na

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L87
    ANSWER 6 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
    2001:143692 HCAPLUS
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DN 134:194136

Calixarene inclusion compound additives, their manufacture, and ΤI resin compositions containing them

Yang, Wu; Kanbara, Hajime; Osawa, Mika; Ueno, Yoko; Okoshi, Masayuki IN

PΑ Kansai Shingijutsu Kenkyusho K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp. CODEN: JKXXAF

DTPatent

LA Japanese

FAN.CNT 1

GI

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2001055469	A2	20010227	JP 1999-370178	19991227 <
	WO 2001048072	A1	20010705	WO 2000-JP8599	20001205 <
	W: CN, KR, US				
	RW: AT, BE, CH,	CY, DE	, DK, ES,	FI, FR, GB, GR, IE, IT,	LU, MC, NL,
	PT, SE, TR				
	EP 1253168	A1	20021030	EP 2000-979094	20001205 <
	EP 1253168	B1	20050323		
	R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
	IE, FI, CY,	TR			
	US 2003057406	A1	20030327	US 2002-168970	20021015 <
PRAI	JP 1999-164093	A	19990610	<	
	JP 1999-370178	Α	19991227	<	
	WO 2000-JP8599	W	20001205		
os	MARPAT 134:194136				

AB The additives comprising functional compds. dispersed in solid calixarenes I (R1, R2, R3 = H, (un)substituted (un)saturated alkyl, (un)substituted alkoxy, aryl, halo, nitro, etc.; R4 = (un)substituted (un)saturated alkyl, (un)substituted aryl, acyl; l, m, n, x, y = 0-10; l + m + n = 4-10; M+k = metal ion, NH4+, organic cation; Z-i = anion; i, k = 1-6; x + k = i + y + n) are manufactured Thus, 4-tert-butylcalix[6]arene was mixed with KOH and tetrasodium copper(II) phthalocyaninetetrasulfonate in an aqueous medium, precipitated, and blended with polypropylene to give a composition showing

good dispersibility, blue color, and crystallization temperature increase 13°.

85209-91-2DP, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl)
phosphate, inclusion compds. with 4-tert-butylcalix[6]arene
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP
(Preparation); USES (Uses)

(crystal nucleating agent; manufacture of calixarene inclusion compds. for resin additives)

Ι

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 7 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN AN 2001:40173 HCAPLUS

DN 134:101667

TI Fire-resistant polycarbonate-based synthetic resin compositions

IN Negishi, Yoshinori; Yukitake, Hideaki; Kimura, Ryoji

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				
PI JP 2001011297	A2	20010116	JP 1999-186675	19990630 <
PRAI JP 1999-186675		19990630	<	
OG MADDAT 134 - 1016	67			

GI

Title compns. comprise polycarbonates, phosphate fire retardants, compds. represented by the general formula I, and optionally styrenic resins, where R = H or C1-8 alkyl, R1, R2 = C1-8 alkyl, l = 1 or 2, and M = alkali metal, alkaline earth metal, or hydroxyaluminum. Thus, a composition comprising Iupilon E 2000F 100, (PhO)2P(:O)[O-m-C6H4-OP(:O)(OPh)]nOPh 5, and I (R = H, R1-2 = tert-Bu, l = 1, M = Na) 0.2 parts showed no bleed out and UL-94 flame-extinguishing time 0.0 s.

IT 85209-91-2

RL: MOA (Modifier or additive use); USES (Uses)
(auxiliary fire retardant; fire-resistant polycarbonate-based synthetic resin compns.)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

L87 ANSWER 8 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:900712 HCAPLUS

DN 134:57503

TI Aromatic metal phosphorate nucleating agent

IN Takahashi, Masayuki; Haruna, Tohru

PA Asahi Denka Kogyo K.K., Japan; Takahashi, Yuko

SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PA	rent 1	NO.			KIN	D	DATE		APP	LICAT	ION I	NO.		D	ATE		
						-								-			
WO	2000	0770	86		A1		2000	1221	WO :	2000-	JP39	12		2	0000	615	<
	W:	KR,	US														
	RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI, FR	, GB,	GR,	ΙE,	ΙT,	LU,	MC,	ΝL,	
		PT,	SE														
JP	2001	0590	40		A2		2001	0306	JP :	2000-	1798	56		2	0000	615	<
EΡ	1209	190			A1		2002	0529	EP :	2000-	9372	53		2	0000	615	<
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	FI,	CY													
JP	1999	-168	864		Α		1999	0615	<								
WO	2000	-JP3	912		W		2000	0615	<								
	JP EP	WO 2000 W: RW: JP 2001 EP 1209 R: JP 1999	W: KR, RW: AT, PT, JP 20010590 EP 1209190 R: AT, IE, JP 1999-168	WO 2000077086 W: KR, US RW: AT, BE, PT, SE JP 2001059040 EP 1209190 R: AT, BE,	WO 2000077086 W: KR, US RW: AT, BE, CH, PT, SE JP 2001059040 EP 1209190 R: AT, BE, CH, IE, FI, CY JP 1999-168864	WO 2000077086 A1 W: KR, US RW: AT, BE, CH, CY, PT, SE JP 2001059040 A2 EP 1209190 A1 R: AT, BE, CH, DE, IE, FI, CY JP 1999-168864 A	WO 2000077086 A1 W: KR, US RW: AT, BE, CH, CY, DE, PT, SE JP 2001059040 A2 EP 1209190 A1 R: AT, BE, CH, DE, DK, IE, FI, CY JP 1999-168864 A	WO 2000077086 A1 2000 W: KR, US RW: AT, BE, CH, CY, DE, DK, PT, SE JP 2001059040 A2 2001 EP 1209190 A1 2002 R: AT, BE, CH, DE, DK, ES, IE, FI, CY JP 1999-168864 A 1999	WO 2000077086 A1 20001221 W: KR, US RW: AT, BE, CH, CY, DE, DK, ES, PT, SE JP 2001059040 A2 20010306 EP 1209190 A1 20020529 R: AT, BE, CH, DE, DK, ES, FR, IE, FI, CY JP 1999-168864 A 19990615	WO 2000077086 A1 20001221 WO 3 W: KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR PT, SE JP 2001059040 A2 20010306 JP 3 EP 1209190 A1 20020529 EP 3 R: AT, BE, CH, DE, DK, ES, FR, GB, GR IE, FI, CY JP 1999-168864 A 19990615 <	WO 2000077086 A1 20001221 WO 2000- W: KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, PT, SE JP 2001059040 A2 20010306 JP 2000- EP 1209190 A1 20020529 EP 2000- R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, IE, FI, CY JP 1999-168864 A 19990615 <	WO 2000077086 A1 20001221 WO 2000-JP39 W: KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, PT, SE JP 2001059040 A2 20010306 JP 2000-1798 EP 1209190 A1 20020529 EP 2000-9372 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, IE, FI, CY JP 1999-168864 A 19990615 <	WO 2000077086 A1 20001221 WO 2000-JP3912 W: KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, PT, SE JP 2001059040 A2 20010306 JP 2000-179856 EP 1209190 A1 20020529 EP 2000-937253 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, IE, FI, CY JP 1999-168864 A 19990615 <	WO 2000077086 A1 20001221 WO 2000-JP3912 W: KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, PT, SE JP 2001059040 A2 20010306 JP 2000-179856 EP 1209190 A1 20020529 EP 2000-937253 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, IE, FI, CY JP 1999-168864 A 19990615 <	WO 2000077086 A1 20001221 WO 2000-JP3912 22 W: KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, PT, SE JP 2001059040 A2 20010306 JP 2000-179856 2: EP 1209190 A1 20020529 EP 2000-937253 2: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, IE, FI, CY JP 1999-168864 A 19990615 <	WO 2000077086 A1 20001221 WO 2000-JP3912 20000 W: KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, PT, SE JP 2001059040 A2 20010306 JP 2000-179856 20000 EP 1209190 A1 20020529 EP 2000-937253 20000 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, IE, FI, CY JP 1999-168864 A 19990615 <	WO 2000077086 Al 20001221 WO 2000-JP3912 20000615 W: KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE JP 2001059040 A2 20010306 JP 2000-179856 20000615 EP 1209190 A1 20020529 EP 2000-937253 20000615 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY JP 1999-168864 A 19990615 <

The agent is an aromatic phosphoric ester metal salt having a formula of I (R1 = C4-8 alkyl; R2 = H, C1-8 alkyl; R3 = C1-4 alkylidene; A = a metal having a valent of n; n = 1-2) having an average diameter on the longitudinal direction of ≤10 <mm, an average aspect ratio of ≤10, and a bulk sp. gr. of ≥0.1. It has excellent handle-ability in incorporation into resins, and is highly effective in improving the transparency and mech. strength of the resins. Thus, reaction of 3 mol 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate and 3 mol NaOH in 300 g H2O and 292 g MeOH, drying, and grinding gave I (R1-2 = tert-C4H9; R3 = CH2; A = Na+; n = 1).

IT 85209-91-2P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(aromatic metal phosphorate nucleating agent)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

RETABLE

Referenced Author (RAU)		, , , ,	(RPG)	Referenced Work (RWK)	Referenced File
	+===== 1994	+====+ 		+=====================================	HCAPLUS

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JP 63037148 A
                                                                  HCAPLUS
Chisso Corp
                                                                   HCAPLUS
                         1988
                                             EP 255693 A
Chisso Corp
Chisso Corporation
                         1992
                                             JP 04270753 A
                                                                   HCAPLUS
                                                                  HCAPLUS
Chisso Corporation
                         1998
                                             JP 10251458 A
Dainippon Ink And Chemi | 1996
                                             JP 881592 A
                         1999
                                             JP 1112429 A
Mitsui Chemicals Ltd
Tónen Chemical Corp
                        1998
                                            JP 1053673 A
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L87 ANSWER 9 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
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AN 2000:887715 HCAPLUS

DN 134:30264

TI Crystalline propylene polymer compositions and their moldings

IN Azuma, Yasushi; Tsujita, Koji; Tamura, Satoshi; Obata, Hiroshi; Ohnishi, Satoshi

PA Idemitsu Petrochemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2000351878	A2	20001219	JP 1999-163942	19990610 <
PRAI	JP 1999-163942		19990610	<	

The compns. contain (A) crystalline propylene polymers satisfying the relation $\alpha \leq 1.11 + [\eta] - 0.42 + 1.40$ [α (%) = content of soluble components measured at 0° by temperature-rising elution fractionation; [η] (dL/g) = intrinsic viscosity in tetralin at 135°] and (B) crystal nucleating agents. Thus, propylene was prepolymd. and polymerized in the presence of solid catalyst components [prepared from Mg(OEt)2, SiCl4, di-Bu phthalate, and TiCl4], Et3Al, and diisopentyldimethoxysilane to give polypropylene powder, 100 parts of which was kneaded with 0.2 part hydroxyaluminum bis(p-tert-butyl)benzoate and additives and injection-molded to give test pieces showing content of soluble components (at 0°) 1.19%, [η] 0.79, tensile modulus 2270 MPa, flexural modulus 2190 MPa, Rockwell hardness 117, and haze 80%.

IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-

butylphenyl)phosphate

RL: MOA (Modifier or additive use); USES (Uses)

(nucleating agent; crystalline propylene polymer compns. containing nucleating

agents for moldings with good mech. properties)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

L87 ANSWER 10 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:851278 HCAPLUS

DN 134:18123

TI Polypropylene-type resin blend compositions having high melt

IN Iwashita, Toshiyuki; Kinoshita, Tasuke

PA Nippon Polyolefin K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2000336217	A2	20001205	JP 1999-147300	19990526 <
PRAI	JP 1999-147300		19990526	<	

The compns. contain (A) 20-97 parts polypropylenes having MFR 0.01-300 q/10 min and satisfying PI ≥4.0 [PI = 105-folds of the reciprocal number of dynamic storage modulus (unit; Pa) of the intersecting point Gc of $G'(\omega)$ and $G''(\omega)$; $G'(\omega)$ and $G''(\omega)$ = dependency curves of dynamic storage modulus and loss modulus at frequency ω , resp.] and isotactic pentad ratio (IP) ≥0.98 and (B) 3-80 parts polypropylenes prepared by irradiating ionized radiation on polypropylenes having MFR <5 g/10 min and IP $\geq 0.0428 + \log(MFR) + 0.965$. The compns. may contain nucleating agents 0.001-20 parts per 100 parts of the resins. Thus, 80 parts polypropylene having MFR 0.48 g/10 min, weight-average mol. weight 4.22 + 105, PI 4.8, and IP 0.985, 20 parts γ-ray-irradiated polypropylene having MFR (after irradiation) 5.4 g/10 min and IP 0.944, and 0.03 part tris(2,4-di-tert-butylphenyl)phosphite were blended, kneaded at 210°, and pelletized to give pellets with MFR 0.81 g/10 min and melt tension 14 g, which was vacuum-formed to give a molding having good appearance.

IT 85209-91-2, ADK Stab NA 11

RL: MOA (Modifier or additive use); USES (Uses) (nucleating agents; blends of polypropylenes having sp. dynamic viscoelastic indexes and ionized radiation-treated polypropylenes having high melt tension)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

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ANSWER 11 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
L87
AN
     2000:830413 HCAPLUS
DN
     134:18099
     Propylenic resin and blow molded automobile parts
ΤI
     Nakamura, Tetsuya; Tsubokawa, Masaya
IN
PΑ
     Idemitsu Petrochemical Co., Ltd., Japan
SO
     U.S., 9 pp.
     CODEN: USXXAM
DT
     Patent
     English
T.A
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE,
                         ----
                                            -----
PΙ
    US 6153715
                          Α
                                20001128
                                            US 1998-154732
                                                                    19980917
PRAI US 1998-154732
                                19980917 <--
    A propylene resin composition for bumpers, seat back, instrument
     panel, etc., is composed of a nucleating agent and a propylene
     resin having a melt index (MI) ≤1.2 g/10 min and satisfying
     the relation between elongational viscosity (\eta E) and melt index (MI)
     represented by 2.0 + 105 + MI-0.68 \geq \eta E \geq 1.5
     + 105MI + MI-0.68. An example nucleating agent was sodium
     methylenebis(2,4-di-tert-butylphenyl)phosphate.
IT
     85209-91-2
     RL: MOA (Modifier or additive use); USES (Uses)
        (nucleating agent; propylene resin blow molded automobile
        parts having rigidity, lightness, heat resistance, and drawdown
        resistance)
RN
     85209-91-2 HCAPLUS
     12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-
CN
```

dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

מ	רים	תי	D.	LE

Referenced Author (RAU)	Year		Referenced Work (RWK)	Referenced File
Fyjita Kijima	1994 1998	•	US 5331054	HCAPLUS HCAPLUS

L87 ANSWER 12 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:762031 HCAPLUS

DN 133:336000

TI Colored polymer compositions with excellent dimensional stability

IN Takahashi, Masayuki; Yoshikawa, Kazumi; Takeuchi, Takashi

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

MARPAT 133:336000

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2000302986	A2	20001031	JP 1999-110526	19990419 <
PRAI	JP 1999-110526		19990419	<	

OS GI

The compns. contain crystalline polymers, I (R1, R2 = C1-8 alkyl; n = 1, 2; M = alkali metal if n = 1; M = alkaline earth metal or hydroxyaluminum if n = 2), pigments, and pigment dispersants comprising metal salts of C8-30. alkyl-containing mono- or dialkyl phosphates. Thus, a test piece containing Profax 6501 (polypropylene) 100, 2,2'-methylenebis(4,6-di-tert-butylphenol) phosphate Na salt 0.1, phthalocyanine blue 2, and a 1:1 (mol) In monostearyl phosphate-In distearyl phosphate mixture 0.3 part showed warpage 1.2 mm and flexural modulus 1760 MPa.

IT 85209-91-2, 2,2'-Methylenebis(4,6-di-tert-butylphenol) phosphate
 sodium salt

RL: MOA (Modifier or additive use); USES (Uses) (nucleating agent; cyclic phosphate metal salt-containing colored polymer compns. with good dimensional stability)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 13 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:267242 HCAPLUS

DN 132:298873

TI Propylene resin compositions for manufacturing medical

instruments

IN Asanuma, Tadashi; Wada, Isao

PA Grand Polymer K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2000119461	A2	20000425	JP 1998-298191	19981020 <
PRAI	JP 1998-298191		19981020	<	

OS MARPAT 132:298873

AB Propylene resin compns. for manufacturing medical instruments or medical goods [e.g. blood bags] showing excellent transparency, rigidity and thermostability comprise: [a] propylene polymer (having MFR of 4-20 g/10min) 100, [b] phosphate antioxidants 0.05-0.5, [c] amine antioxidants 0.01-0.3 and [d] specific organophosphate ester-type compds. 0.1-1.0 weight parts.

IT 85209-91-2

RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(propylene resin compns. for manufacturing medical instruments)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 14 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:252104 HCAPLUS

DN 132:266253

TI Propylene polymer-type **resin** compositions having excellent surface hardness and impact resistance and their injection moldings

IN Mori, Akiji; Yoshii, Koji; Ishimoto, Akio

PA Grand Polymer K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2000109637 20000418 JP 1998-282102 19981005 <--A2 PΤ PRAI JP 1998-282102 19981005 <--

The compns. comprise (A) 10-94 parts propylene (I) block copolymers, (B) 0-70 parts I homopolymer or I random copolymers with MFR (230°, 2.16-kg load) 0.1-200 g/10 min, (C) 5-30 parts ethylenic copolymer compns. prepared by melting and mixing (C-1) ethylenic polymers with MFR 0.01-50 g/10 min and Tc > 1920d. - 1620 (Tc = temperature of exothermic peak by DSC) 100, (C-2) vinylsilane-modified inorg. fine particles 5-20, (C-3) crosslinking agents 0.01-1, (C-4) crosslinking aids 0.01-1, and (C-5) nucleating agents 0-5 parts, (D) 0-20 parts flake-type inorg. fillers, and (E) 1-25 parts SiO2 fine particles. The injection moldings, especially suitable

for parts of automobile exteriors and household electronic appliances. Thus, 100 parts of an ethylenic polymer with d. 0.885, Tm 38.2°, Tc 114.3°, and MFR 8 g/10 min, prepared by kneading 66 parts ethylene-1-butene copolymer (d. 0.86, MFR 7 g/10 min) with 24 parts polyethylene (d. 0.96) at 230°, was kneaded with SiO2 (Aerosil RX 200) surface-modified with vinylsilane 10, 2,5-dimethyl-2,5-di(tertbutylperoxy) hexane 0.05, divinylbenzene 0.15, and Na 2,2'-methylenebis(4,6di-tert-butylphenyl)phosphate 1 part at 230° to give a composition It (13 parts) was kneaded with 38:62 (mol) ethylene-I block copolymer 40, I homopolymer 27, talc (Micel-Tone) 10, and SiO2 (Aerosil R 972) 10 parts at 230° to give a composition, which was injection-molded to give test pieces exhibiting flexural modulus 2200 MPa, notched Izod impact strength 300 J/m, Rockwell hardness 87, pencil hardness HB, and heat distortion temperature 141°.

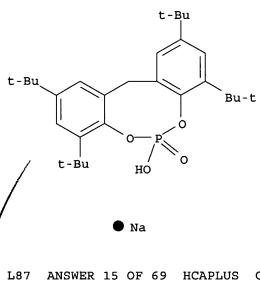
IT **85209-91-2**, Sodium 2,2'-methylenebis(4,6-di-tert-

butylphenyl) phosphate

RL: MOA (Modifier or additive use); USES (Uses) (nucleating agents; in propylene polymer-type resin compns. having excellent surface hardness and impact resistance and their injection moldings)

RN 85209-91-2 HCAPLUS

12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-CN dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)



ANSWER 15 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:137388 HCAPLUS

DN 132:181460

Crystalline polymer material compositions containing alkylidenebisphenol TI cyclic phosphate metal salts

Takahashi, Masayuki; Tobita, Etsuo IN

Asahi Denka Kogyo K. K., Japan PA

Jpn. Kokai Tokkyo Koho, 6 pp. SO

CODEN: JKXXAF

Patent DT

Japanese LA

FAN.	CNT	1
	ייעם	ידאיםיו

FAN.CNT 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000063595	A2	20000229	JP 1998-235540	19980821 <
US 618427 <u>5</u>	B1	20010206	US 1999-373573	19990813 <
KR 2000017413	Α	20000325	KR 1999-34540	19990820 <
EP 982357	A2	20000301	EP 1999-116173	19990823 <
EP 982357	A 3	20000531		
EP 982357	B1	20040519		
R: AT, BE, C	H, DE, D	K, ES, FR,	GB, GR, IT, LI, LU, NI	SE, MC, PT,
IE, SI, L'	r, Lv, F	I, RO		
ES 2218910	Т3	20041116	ES 1999-116173	19990823 <
PRAI JP 1998-235540	Α	19980821	<	
OS MARPAT 132:181460				
GI				

$$\begin{array}{c|c}
R^1 \\
R^2 \\
M-O-P & HC-R^3 \\
O & R^2
\end{array}$$

Ι

AB The compns. contain alkylidenebisphenol cyclic phosphate metal salts I (R1, R2 = C1-9 alkyl; R3 = H, C1-4 alkyl; M = alkali metal) with Cl content ≤500 ppm 0.005-5 parts for 100 parts crystalline polymer materials. The compns. have good surface appearances, free from void formation, and excellent hardness and transparency and are suitable for food and medical packagings. Thus, polypropylene (Profax) 100, Ca stearate 0.005, tetrakis[methylene-β-(3,5-di-tert-butyl-4hydroxyphenyl) propionate] methane 0.1, and I (R1, R2 = tert-Bu, R3 = H, M = Na; Cl content 165 ppm) 0.1 part were kneaded at 180°, compression-molded at 250°, quenched to 60° to give a sheet, and biaxially drawn to give a film with good appearance and free from void.

IT 85209-91-2

RL: MOA (Modifier or additive use); USES (Uses) (crystalline polymer material compns. containing alkylidenebisphenol cyclic phosphate metal salts as nucleating agents and having good transparency and appearances free from voids)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

● Na

ANSWER 16 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

1999:819427 HCAPLUS

.⊉N 132:64952

Preparation of propylene polymer and composition with transparency, flexibility, and melt flowability

IN Minami, Yutaka; Kijima, Masato; Okamoto, Takuji; Seta, Yasushi; Mogi, Yasuhiro; Ota, Tsuyoshi; Funabashi, Hideo; Kashiwamura, Takashi; Tani, Noriyuki; Kanamaru, Masami; Kakigami, Koji

PA Idemitsu Petrochemical Co., Ltd., Japan; et al.

SO PCT Int. Appl., 345 pp. CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 4

1111	PATENT NO.	KTND	DATE	APPLICATION NO.	DATE
PI	WO 9967303 W: US	A1	19991229	WO 1999-JP3405	19990625 <
	RW: AT, BE, PT, SE	CH, CY, DE	, DK, ES,	FI, FR, GB, GR, IE, IT,	LU, MC, NL,
	JP 11166084	A2	19990622	JP 1998-239872	19980826 <
	JP 11302474	A2	19991102	JP 1998-302892	19981023 <
	JP 2000095820	A2	20000404	JP 1999-55025	19990303 <
	JP 2000281723	A2	20001010	JP 1999-86491	19990329 <
	EP 1095951	A 1	20010502	EP 1999-926823	19990625 <
	R: DE				
	JP 2000344833	A2	20001212	JP 1999-284607	19991005 <
	JP 2000355612	A2	20001226	JP 1999-284606	19991005 <
	US 6906155	B1	20050614	US 2001-719552	20010228
	US-2005043495	A1	20050224	US 2004-855964	20040528 <
PRAI	JP 1998-179252	Α	19980625	<	
	JP 1998-210115	Α	19980724	<	
	JP 1998-239872	Α	19980826	<	
	JP 1998-302892	Α	19981023	<	
	JP 1999-283	Α	19990105	<	
	JP 1999-55025	A	19990303	<	

JР	1999-79694	Α	19990324	<
JP	1999-86491	A	19990329	<
JP	1999-93420	A	19990331	<
JP	1999-103996	A	19990412	<
JP	1997-230611	A	19970827	<
JP	1998-39960	A	19980223	<
WO	1999-JP3405	W	19990625	<
US	2001-719552	A3	20010228	

OS MARPAT 132:64952

Title composition, useful as substitute for flexible vinyl chloride resin, comprises (A) a propylene homopolymer or a copolymer of propylene with ethylene and/or C4-40 α-olefin, which has isotactic pentad fraction (mmmm fraction) 30-80 mol% or stereoregular index (P) 55-90 mol%, mol. weight distribution (Mw/Mn) <3.5, and intrinsic viscosity [η] 0.8-5 dL/g, and is polymerized in the presence of a metallocene catalyst, and optionally (B) a nucleating agent >10 ppm. Thus, polypropylene with mmmm fraction = 63.5 mol%, [η] = 1.2 dL/g, and Mw/Mn = 1.8 was prepared in the presence of triisobutylaluminum, methylaluminoxane, and (1,2'-ethylene)(2,1'-ethylene)-bis(3-methylindenyl)zirconium dichloride, to give a press-molded test piece with good transparency, internal Haze 14, and tensile modulus 250 MPa.
IT 85209-91-2, ADK Stab NA 11

RL: MOA (Modifier or additive use); USES (Uses)
(nucleating agent for preparation of propylene polymer composition)
85209-91-2 HCAPLUS

12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

RETABLE

RN CN

Referenced Author (RAU)	Year VOL (RPY) (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon		 	EP 574258 A2	HCAPLUS
Anon	i i	İ	US 5747621 A	HCAPLUS
Anon			DE 69316271 E	
Anon			EP 719802 A2	HCAPLUS
Anon			EP 745099 A1	HCAPLUS
Anon			WO 9620225 A2	HCAPLUS
Anon			WO 9744389 A1	HCAPLUS
Anon		ŀ	WO 9842757 A1	HCAPLUS
Chisso Corp	1993		JP 05-112611 A	HCAPLUS

Hoechst AG	1996	JP 08-231640 A	HCAPLUS
Idemitsu Kosan Co, Ltd	1995	JP 07-102013 A	HCAPLUS
Idemitsu Kosan Co, Ltd	1996	JP 08-20605 A	HCAPLUS
Idemitsu Kosan Co, Ltd	1998	JP 10-259207 A	HCAPLUS
Idemitsu Petrochemical	1999	JP 11-1584 A	HCAPLUS
Mitsubishi Petrochemica	1994	JP 06-100613 A	HCAPLUS
Montell Technology Comp	1997	JP 09-509982 A	1
Symitomo Chemical Co, L	1997	JP 09-309982 A	HCAPLUS

AN 1999:804363 HCAPLUS

DN 132:50712

TI Colored synthetic resin composition for injection molding

IN Takahashi, Masayuki; Kono, Toshinori; Takeuchi, Takashi

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

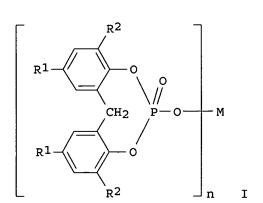
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

1111.0111 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11349740	A2	19991221	JP 1998-163906	19980611 <
PRAI JP 1998-163	906	19980611	<	
OS MARPAT 132:	50712			
CT				



SIG

AB The title compns. are realized by adding 0.005-5 parts I (R1, R2 = C1-8 alkyl; n = 1, 2; when n = 1, M = alkali metal and when n = 2, alkaline earth metal or AlOH) and 0.02-20 parts coloring agent selected from iron oxide pigments, azo pigments, and phthalocyanine pigments to 100 parts crystalline polymer. The composition has good processing stability and rigidity, and low deformation. A composition contained Profax 6501, phthalocyanine blue, and II. 85209-91-2

RL: MOA (Modifier or additive use); USES (Uses)

(colored synthetic resin composition for injection molding)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

● Na

L87 ANSWER 18 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:772656 HCAPLUS

DN 132:13169

TI Aqueous resin compositions for antibacterial coating formation

IN Nakata, Tadahiro; Kimura, Ryoji

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

GI

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11335504 PRAI JP 1998-141863 OS MARPAT 132:13169	A2	19991207 19980522 <	JP 1998-141863	19980522 <

$$\begin{bmatrix}
R^{1} & & & & \\
R^{2} & & & & & \\
R^{3} & & & & & \\
R^{3} & & & & & \\
R^{2} & & & & & \\
R^{3} & & & & & \\
R^{2} & & & & & \\
R^{1} & & & & & \\
\end{bmatrix}$$

AB Title compns. comprise 2-90 weight% of solid resin including 1-85 weight% of a polyurethane resin and 1-85 weight% of an acrylic resin and 0.001-10 parts (based on 100 parts of solid resin) of cyclic organic phosphoric acid ester I (R1-3 = H, C1-18

 $oldsymbol{L}$ 87 ANSWER 19 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:708474 HCAPLUS

DN 131:323416

TI Propylene-based resin composition for injection molded parts

IN Sobajima, Yoshihiro; Hayakawa, Yuu; Banno, Yoshihiro

PA Japan Polychem Corporation, Japan

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PAT	CENT	NO.			KINI	D	DATE	;	APF	LICATI	ON N	10.		D?	ATE		
							-				·	- -						•
PI.	ΕP	9536	02			A1		1999	1103	EP	1999-1	L0749	8		19	99904	130	<
	ΕP	9536	02			B1		2003	1001									
		R:	ΑT,	ΒE,	CH,	DE,	DK,	, ES,	FR,	GB, GR	?, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	, RO										
	JP	1131	5186			A2		1999	1116	JP	1998-1	L3758	39		19	9980	501	<
	JΡ	3347	289			В2		2002	1120									
	CN	1234	412			Α		1999	1110	CN	1999-1	L0586	58		19	99904	129	<
	CN	1125	128			В		2003	1022									
	$\mathbf{T}\mathbf{W}$	5146	54			В		2002	1221	TW	1999-8	38107	7061		19	99904	130	<
PRAI	JP	1998	-137	589		Α		1998	0501	<								
7 D	ml _a a		1		_ : _ : .	1			1-1	11			1			_ 7 7 1	1-	

AB The title composition that exhibits excellent processability, well-balanced mech. properties (high rigidity, impact strength and surface hardness), excellent weather resistance, is suitable for a variety of members for industrial devices, and interior members for automobiles. The title composition comprises (a) 100 parts propylene/ethylene block copolymer (I) comprising 60-78% of a crystalline polypropylene homopolymer portion (A) and 22-40% ethylene/propylene random copolymer portion (B), containing 30-52% ethylene, and having a weight-average mol. weight (Mw) 230,000-600,000, the whole

composition (a) having a melt flow rate (MFR at 230° and 2.16 kg) 25-40 g/10 min and ≤100 gels of gel size ≥50 μm in a molded article, 25 cm2 in area and 0.5 mm in thickness, (b) 1-8 parts ethylene/α-olefin copolymer rubber, containing 20-50% C4-8 α-olefin and having an MFR 0.5-15 g/10 min, (c) 0.01-2 parts hindered amine stabilizer compound having a mol. weight ≥450, (d) 0-2 parts nucleating agent, and (e) 0-6 parts talc having an average particle size 1.5-15 μm. Thus, a blend of I (75% A; 25% B; Mw 380,000; 32 gels; MFR 30) 100, 1-butene-ethylene copolymer rubber (metallocene catalyzed; MFR 4.0; d. 0.862 g/cm3) 4, and bis-2,2,6,6-tetramethyl-4-piperidyl sebacate 0.2 parts was pelletized and injection molded into test parts having MFR 28, bending modulus (JIS K 7203) 1080 MPa, notched Izod impact strength 32 kJ/m2, Rockwell hardness 72, and good weather resistance.

IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-

butylphenyl)phosphate

RL: MOA (Modifier or additive use); USES (Uses)
(nucleating agent; composition of ethylene-propylene block copolymer, ethylene rubber, stabilizers, nucleating agent and fillers with good balance of mech. properties for injection molded parts)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

RETABLE

Referenced Author (RAU)	Year VOL (RPY) (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Japan Polychem Corp	1997	I	EP 0791630 A	HCAPLUS
Japan Polychem Corp Japan Polychem Corp	1997 1997	!!!		HCAPLUS HCAPLUS
Kohhei, U	1994		US 5354795 A	HCAPLUS

L87 ANSWER 20 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:631442 HCAPLUS

DN 131:244150

TI Propylene resin composition and stretched film produced therefrom

IN Sezume, Tadashi; Nakamura, Yasunori

PA Japan Polychem Corporation, Japan

SO Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

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DT
     Patent
     English
LA
FAN.CNT 1
                       KIND
     PATENT NO.
                                DATE
                                           APPLICATION NO.
                                                                   DATE
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                                            ______
                                                                    ------
                         A2
                                19990929
                                            EP 1999-302243
                                                                   19990323 <--
     EP 945490
PΙ
                        A3
     EP 945490
                                19991222
                         В1
                                20020703
     EP 945490
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                                19991103
                                           CN 1999-105634
                                                                   19990324 <--
     CN 1233629
                         Α
                         A2
                                19991207
                                            JP 1999-80535
                                                                   19990324 <--
     JP 11335500
                                            US 1999-275018
     US <u>614381</u>3
                         Δ
                                20001107
                                                                   19990324 <--
                         Α
                                19980324 <--
PRAI JP 1998-75661
     A propylene resin composition is disclosed comprising: a
     propylene-α-olefin random copolymer composed mainly of propylene,
     the propylene-\alpha-olefin random copolymer satisfying the following
     copolymer property requirements (1) to (4); a nucleating agent which, when
     added to the propylene-\alpha-olefin random copolymer, can bring the
     isothermal crystallization time [B] at 115° of the copolymer to a value
     satisfying the following requirements [I] and [II]; and 0.01-1 parts ,
     based on 100 parts by weight of the propylene-\alpha-olefin random
     copolymer, of spherical magnesium silicate particles having an average
     particle diameter of 0.5 to 7.0 µm and a sphericity (f) of not less than
     0.7: (i) copolymer property requirements (1) the melt flow rate of 1.0 to
     20.0 g/10 min, (2) the melting peak temperature of 130-150° as determined by
     DSC, (3) the extraction of not more than 4.0% by weight as measured at 40°C
     using o-dichlorobenzene as a solvent, and (4) polydispersity 1.5-7.0; and
     (ii) isothermal crystallization time at 115°C 50 \leq [A] - [B]
     ≤ 500 [B] ≤ 100 wherein [A] represents the isothermal
     crystallization time (sec) at 115° of the propylene-\alpha-olefin random
     copolymer with the nucleating agent not added thereto as measured with
     DSC; and [B] represents the isothermal crystallization time.
     provided a stretched film produced by forming the propylene resin
     composition into a sheet or a film and at least monoaxially stretching the
     sheet or film.
TT
     85209-91-2
     RL: MOA (Modifier or additive use); USES (Uses)
        (propylene resin composition and stretched film produced
        therefrom)
RN
     85209-91-2 HCAPLUS
     12H-Dibenzo [d, q] [1,3,2] dioxaphosphocin, 2,4,8,10-tetrakis(1,1-
CN
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dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

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L87 ANSWER 21 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
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AN 1999:421055 HCAPLUS

DN 131:88821

TI Propylene polymer compositions for toilet parts with good resistance to warp and discoloration

IN Kawai, Shigenobu; Osegaki, Kimio; Uchida, Masaru

PA Nippon Polychemicals Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 11181182	A2	19990706	JP 1997-357546	19971225 <
PRAI	JP 1997-357546		19971225	<	

The compns., useful for toilet seats, seat covers, water spray nozzles, tanks, etc., contain (a) highly crystalline propylene polymers showing isotactic pentad fraction ≥96% and (b) nucleating agents and show melt flow index (MFR) 0.5-100 g/10 min, memory effect (ME) 0.90-1.30, and crystallization initiation temperature 125-136°. Thus, a test piece comprising highly crystalline polypropylene (isotactic pentad fraction 97%, MFR 8 g/10 min) 100, pentaerythrityl tetrakis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate] 0.1, tris(2,4-di-tert-butylphenyl) phosphite 0.1, Ca stearate 0.05, erucamide 0.2, 1,3,2,4-di(p-methyl)benzylidenesorbitol 0.1, TiO2 1.5, and 2,5-dimethyl-2,5-di-(tert-butylperoxy)hexane 0.012 part showed MFR 15 g/10 min, ME 1.11, crystallization initiation temperature 130.8°, flexural modulus 16,000 kg/cm2, and good warp resistance.

IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl)
phosphate

RL: DEV (Device component use); MOA (Modifier or additive use); PRP (Properties); USES (Uses)

(nucleating agent; polypropylene compns. with good warp and discoloration resistance for toilet parts)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

L87 ANSWER 22 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:331436 HCAPLUS

DN 131:9682

TI Polypropylene resin compositions for medical containers

IN Yamazaki, Hajime; Kitano, Yoshitada; Okada, Hiroharu

PA Nippon Polychemicals Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

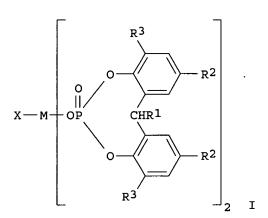
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

-	ini.cmi i				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
P	I JP 11140247	A2	19990525	JP 1997-317619	19971104 <
P	RAI JP 1997-317619		19971104	<	
0	S MARPAT 131:9682				
G	I				



AB The compns., which satisfy all items of the test for polyethylene or polypropylene containers for aqueous injections in Japanese Pharmacopeia, contain (A) 100 parts polypropylene or propylene-ethylene random copolymer (ethylene content ≤3%) showing Ti content <1 ppm and melt flow rate (MFR) 0.5-70 g/10 min, (B) 0.025-0.15 part ≥1 selected from alkali

metal carboxylates, alkali metal β -diketonates, and β-ketoacetate ester alkali metal salts, (C) 0.025-0.15 part cyclic organic phosphate ester basic polyvalent metal salts I [R1 = H, C1-4 alkyl; R2, R3 = H, C1-12 alkyl; M = group III or IV metal; if M = group III metal, then X = OH; if M = group IV metal, then X = :O, (OH)2], and (D) 0.10 part Mg1-xAlx(OH)2(CO3)x/2.mH2O (II; 0 < $x \le 0.5$; m \le 3) and/or [Al2Li(OH)6]nX.mH2O (III; X = inorg. anion; n = valency of X; m \leq 3) 0.01-0.10 phr so that the following relation is satisfied: b \leq 0.046-0.083a [a = sum of concentration (weight%) of (B) and that of I; b = concentration (weight%) of II and/or III]. The compns. show good resistance to steam sterilization, high transparency, and gas impermeability. Polypropylene (Ti content <1 ppm, MFR 7 g/10 min), NA 11 (cyclic organophosphates) 0.15 phr, Mizukalac 0.03 phr, MARK 2112 (phosphite antioxidant), and TINUVIN 622LD (hindered amine antioxidant) were mixed and extruded to give pellets. The pellets were injection molded into a sheet with haze 20 (27 after steam sterilization), Du Pont impact strength (J) 1.3, which passed the above test.

IT 85209-91-2, ADK Stab NA 11

RL: MOA (Modifier or additive use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polypropylene resin compns. for medical containers containing specific nucleating agents and neutralizing agents)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 23 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:316986 HCAPLUS

DN 130:339050

TI Composition for wallpaper

IN Takahashi, Masayuki; Shinbo, Kosaburo; Dai, Naoko

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
PI JP 11130892 A2 19990518 JP 1997-314629 19971031 <--

PRAI JP 1997-314629 OS MARPAT 130:339050 GI 19971031 <--

$$\begin{bmatrix}
R^{1} & & & \\
R^{2} & & & & \\
R^{3} - CH & P - O & X & (OH)_{m} \\
R^{2} & & & & \\
R^{1} & & & & \\
\end{bmatrix}$$

The title composition comprises (1) 100 parts of a thermoplastic elastomer, (2) 0.001-20 parts of a foaming agent, and (3) 0.001-10 parts of a compound I (R1 = C4-8 alkyl or cycloalkyl, C6-12 aryl, alkylaryl or arylalkyl; R2 = H, C1-8 alkyl or cycloalkyl, C6-12 aryl, alkylaryl or arylalkyl; R3 = H, methyl; n = 1, 2; m = 0-2; X = metal of m+n valence). The invention composition can provide wallpaper with uniform foaming cells and superior mech. strength.

IT 85209-91-2

RL: MOA (Modifier or additive use); USES (Uses)

(contained in foaming composition containing phosphate compound and fire-retarder

I

for wallpaper)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 24 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN AN 1999:271122 HCAPLUS

DN 130:338845

TI Antibacterial nonwoven fabric

IN Kimura, Ryoji; Takahashi, Masayuki; Funamizu, Tomoyuki

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	JP 11116822	A2	19990427	JP 1997-288344	19971021 <		
PRA:	I JP 1997-288344		19971021	<			
os	MARPAT 130:338845						
GI							

AB The antibacterial nonwoven fabric contains a cyclic organic phosphate compound I(R1-3 = C1-18 alkyl; R4 = H, Me; n = 1, 2; M = H or alkali metal when n = 1; M = alkaline earth metal, Zn, or Cu when n = 2) 0.001-10 weight parts based on

100 weight parts of a polymer material. The polymer material may be a polyolefin or polyester. The composition may contain zinc oxide or hydride.

IT 85209-91-2

RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(organic antibacterial agent; antibacterial nonwoven fabric)

RN 85209-91-2 HCAPLUS

● Na

L87 ANSWER 25 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:208738 HCAPLUS

DN 130:282841

TI Whitening-resistant thermoplastic **resin** composition and its production method

IN Mori, Ryoji; Moriya, Satoru; Ishimoto, Akio

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND DATE		APPLICATION NO.	DATE		
ΡI	JP 11080566	A2	19990326	JP 1997-277820	19971009 <		
	JP 11080567	A2	19990326	JP 1997-292877	19971024 <		
PRA]	[JP 1997-184914	Α	19970710	<			

AB The composition with good heat resistance, rigidity, toughness, and gas barrier properties is produced by incorporating a composition containing hydrocarbyloxy-containing Si or Ti compds. and polar medium with a thermoplastic resin and stripping of the medium to give a resin containing 0.001-5 μm microparticles. Melt kneading a composition containing polypropylene 100, tetraethoxysilane 2, H2O 1, and MeOH 0.2 part at 170° and 10 mmHg and injection molding gave test pieces with Izod impact strength 20 J/m, flexural modulus 2300 KPa, and Martens hardness 30.

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); USES (Uses)
(whitening-resistant thermoplastic resin composition with good heat resistance, rigidity, toughness, and gas barrier properties)

RN 85209-91-2 HCAPLUS

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L87 ANSWER 26 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
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AN 1999:155876 HCAPLUS

DN 130:253276

TI Polypropylene **resin** composition for automobile interior material with balanced properties

IN Yagasaki, Takayuki; Wataru, Mitsuru; Kimura, Takashi

PA Grand Polymer K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 11060886	A2	19990305	JP 1997-227945	19970825 <
PRAI	JP 1997-227945		19970825	<	

AB The composition comprises (A) propylene block copolymers with MFR 1-40 g/10 min 70-99, (B) ethylene-C6-10 α -olefin copolymers with MFR 1-60 g/10 min 1-30, (C) fibrous fillers (based on 100 parts polymers) 1-10, and (D) nucleating agents 0.01-1 part. A composition contained ethylene-propylene block copolymer (rubber content 12%) 91, 94:6 mol% ethylene-1-octene copolymer 9, rayon fibers 3, and NA 11 0.2, giving test pieces with MFR 23 g/10 min, tensile strength 26 MPa, Izod impact strength 193 kg-cm/cm, and Rockwell hardness 83.

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); USES (Uses)
 (nucleating agent; polypropylene resin composition for automobile
 interior material)

RN 85209-91-2 HCAPLUS

L87 ANSWER 27 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:119829 HCAPLUS

DN 130:169066

TI Glass fiber-reinforced polyamide resin composition comprising an organic nucleating agent having gasoline resistance

IN Lee, Byung Jin

PA Hyundai Mortor Company, S. Korea

SO U.S., 6 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE --------------------______ US 5872175 19990216 US 1997-889823 PΙ Α 19970708 <--PRAI US 1997-889823 19970708 <--

A polyamide resin composition comprising 60-70 weight% polyamide 6 having relative viscosity 2.2-2.8, 20-30 weight% polyamide 6 having relative viscosity 3.2-3.6, and 3-10 weight% polyamide 66 having relative viscosity 2.5-3.5, aminosilane-treated glass fibers, and an organic nucleating agent in the form of phosphoric acid-metal salt, is especially useful for automobile parts such as a delivery pipe for gasoline or other automobile fuel and exhibits improved mech. strength and gasoline-resistance under thermally severe conditions. Thus, a complex polyamide resin comprising 70 weight% polyamide 6 having relative viscosity 2.6, 23 weight% polyamide 6 having relative viscosity 3.4 (prepared by the formic acid method), and 7 weight% polyamide 66 having relative viscosity 2.6 (prepared by the sulfuric acid method), was blended with 40 phr glass fibers (diameter 13 mm, length 3 mm, surface-treated with an aminosilane coupling agent), 0.3 phr sodium di(4-tert-butylphenyl)phosphate (I), 0.3 phr N,N'-hexamethylene-bis(3,5-ditert-butyl-4-hydroxyamide), and 0.2 phr mold-releasing agent, was injection-molded at 280°, giving parts having tensile strength 2100 kg/cm2, bending strength 3250 kg/cm2, bending modulus of elasticity 109,000 kg/cm2, impact strength 20 kg.cm/cm, and weight change <0.5% in gasoline, compared to 2040, 3220, 107,000, 10, and >0.75%, resp., for a similar composition using talc instead of I.

IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-

butylphenyl)phosphate

RL: MOA (Modifier or additive use); USES (Uses) (nucleating agent; gasoline-resistant glass fiber-reinforced polyamide

comprising an organic nucleating agent)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

🕨 Na

RE7	'AB	LE
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Referenced Author (RAU)	(RPY)	VOL	(RPG)	Referenced Work (RWK)	Referenced File
	 1996	 		US 5500473	HCAPLUS

L87 ANSWER 28 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:708873 HCAPLUS

DN 129:331536

TI Compositions of olefin copolymers containing slip and antiblock agents for clear (laminate) films or sheets

IN Mergenhagen, Laura K.; Simmons, Brian E.; Wevers, Ronald; Fehr, Bernard;
Van Volkenburgh, William R.

PA The Dow Chemical Co., USA; Van Volkenburgh, William R.

SO PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

-						KINI	,	DATE		_				. O <i>l</i>		D	ATE	
		98460 98460				A2 A3		 1998 1999				998-1			-	1	99804	415 <
·		W:	AL, DK, KP, NO, UA,	AM, EE, KR, NZ, UG,	AT, ES, KZ, PL, US,	AU, FI, LC, PT, UZ, LS,	AZ, GB, LK, RO, VN,	BA, GE, LR, RU, YU,	BB, GH, LS, SD, ZW,	GM, LT, SE, AM,	GW, LU, SG, AZ,	HU, LV, SI, BY,	ID, MD, SK, KG,	IL, MG, SL, KZ,	IS, MK, TJ, MD,	JP, MN, TM, RU,	KE, MW, TR, TJ,	KG, MX, TT, TM
A Z	UA AS	22840 9869 9803 9756	FI, CM, 604 740 157	FR, GA,	GB, GN,	GR, ML, AA A1 A A2 DE,	IE, MR,	IT, NE, 1998 1998 1999	LU, SN, 1022 1111 1015 0202	MC, TD,	NL, TG CA 1: AU 1: ZA 1: EP 1:	PT, 998-1 998-1 998-1	SE, 22840 59740 3157 91560	BF, 504 0	ВJ,	CF,	CG, 99804 99804 99804	•

	TW 387920	В	20000421	TW 1998-87105751	19980415 <
	BR 9809570	Α	20001017	BR 1998-9570	19980415 <
	JP 2001520697	T2	20011030	JP 1998-544281	19980415 <
	MX 9909521	Α	20000228	MX 1999-9521	19991015 <
PRAI	US 1997-43954P	P	19970416	<	
	US 1997-69705P	P	19971216	<	
	WO 1998-US7650	W	19980415	<	
OS	MARPAT 129:331536				

AB Resin compns. (for films for packaging sealants) comprise a homogeneous ethylene/α-olefin interpolymer; and a saturated fatty acid amide or saturated ethylenebis(amide), unsatd. fatty acid amide or unsatd. ethylenebis(amide), and a finely divided inorg. compound The compns. comprise a substantially random interpolymer of ≥1 α-olefins with ≥1 vinylidene aromatic monomers and/or ≥1 hindered aliphatic or cycloaliph. vinylidene monomers or blends, slip agents, addnl., ≥1 modifying agent of propylene homopolymers, propylene copolymers, nucleating agents, and mixts. Thus, a blend of Affinity PL 1880 (d. 0.9110 g/cm3; metallocene catalyzed), 1500 ppm erucamide, 250 ppm stearamide, 2500 ppm SiO2 was formed into a blown film (2 mil thickness) having blocking (good <49 g) 45.4 g and coefficient of friction (good <0.31) 0.25.

IT 85209-91-2

RL: MOA (Modifier or additive use); USES (Uses)
(nucleating agent for compns. of metallocene-catalyzed copolymers
containing slip and antiblock agents for (laminate) films or sheets)
85209-91-2 HCAPLUS

RN 85209-91-2 HCAPLUS
CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

● Na

L87 ANSWER 29 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN ΑN 1998:512549 HCAPLUS DN 129:162304 TI Poly(phenylene sulfide) resin compositions with excellent moldability and solder heat resistance IN Ueda, Masaji; Ishikawa, Tomohiro PA Tosoh Corp., Japan so Jpn. Kokai Tokkyo Koho, 7 pp. CODEN: JKXXAF DT Patent LA Japanese

FAN.	CNT 1					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP 10212408	A2	19980811	JP 1997-15359	19970129 <	
	JP 3637715	B2	20050413			
PRAI	JP 1997-15359		19970129	<		
os	MARPAT 129:162304					
GI						

$$R^3$$
 R^2
 R^2
 R^2
 R^3
 R^2
 R^3
 R^2
 R^3

AB Title compns. consist of 100 parts blends of 70-95% polythiophenylenes with melt viscosity 10-50,000 P and 5-30% crystalline polyamides, 0.05-5 parts fatty acid metal salts with decomposition temperature ≥280° or diaryl phosphate metal salts I (R1 = H, C1-4 alkyl; R2, R3 = C1-9 alkyl; M = alkali metal), and 25-100 parts fibrous reinforcing fillers. A composition of p-C6H4Cl2-Na2S copolymer (with melt viscosity 1540 P) 95, UBE nylon 2020H 5, Na montanate 0.5, and glass fibers 67 parts was kneaded, pelletized, and injection molded to give a product showing flow length 62 mm, fin length 38 μm, and good blister resistance.

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); USES (Uses)
(polyamide-containing polythiophenylene compns. with good moldability and solder heat resistance)

RN 85209-91-2 HCAPLUS

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ANSWER 30 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
L87
AN
    1998:334509 HCAPLUS
DN
    Hot-sealable and heat-shrinkable laminated polypropylene films
ΤI
    Hirata, Koji; Maeda, Hiroyuki; Suzuki, Junkichi
IN
    Tokuyama Soda Co., Ltd., Japan
PA
    Jpn. Kokai Tokkyo Koho, 5 pp.
SO
    CODEN: JKXXAF
DT
    Patent
    Japanese
LΑ
FAN.CNT 1
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
    PATENT NO.
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                                           _____
                                -----
                                                                   -----
PΙ
    JP 10138419
                         A2
                               19980526
                                           JP 1996-296196
                                                                  19961108 <--
PRAI JP 1996-296196
                               19961108 <--
    Title films, contain biaxially oriented polypropylene bases and crystal
    nucleating agent-containing polypropylene hot-sealable layers. A biaxially
    oriented 22-μm polypropylene film was clad with 2 1.5-μm 0.2%
    1,3-p-chlorobenzylidene-2,4-p-methylbenzylidene sorbitol-containing 6:94
    C2H4-C3H6 copolymer films to form a laminate showing initial sealing
temperature
    124°, JIS C 2318 120° shrinkability 4.3 and 5.9 in machine
    and transverse direction, resp., and no whitening after shrinkage.
    85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-
IT
    butylphenyl) phosphate
    RL: MOA (Modifier or additive use); USES (Uses)
        (crystal nucleating agent; hot-sealable and shrinkable propylene
       resin laminates containing oriented base and crystal nucleating
       agent-containing layers)
    85209-91-2 HCAPLUS
RN
CN
    12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-
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dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

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L87 ANSWER 31 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
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AN 1998:246639 HCAPLUS

DN 129:5240

TI Methacrylic resins and manufacturing methods therefor

IN Iwane, Kazuyoshi; Matsuo, Ryuichi

PA Sekisui Chemical Co. Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10101860	A2	19980421	JP 1996-353504	19961216 <
PRAI JP 1996-226031	Α	19960807	<	

AB Transparent, impact-resistant, and phase-separating resins comprise matrixes of EVA polymer and dispersed phases of Me methacrylate resins having size 0.01-0.5 μm. Thus, EVA 20, Me methacrylate 180, and bis(4-tert-butylcyclohexyl) peroxydicarbonate 0.5 g were mixed and cast polymerized to prepare a resin.

IT **85209-91-2**, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate

RL: MOA (Modifier or additive use); USES (Uses)
(nucleating agents; transparent and impact-resistant and phase-separating ethylene-Me methacrylate-vinyl acetate graft copolymer)

RN 85209-91-2 HCAPLUS

L87 ANSWER 32 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:126682 HCAPLUS

DN 128:205520

TI Propylene resin compositions with good heat resistance, wear resistances, rigidity, hardness, and high-speed moldability

IN Aoki, Akira; Okata, Hiroharu; Fujita, Yuji

PA Tonen Chemical Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

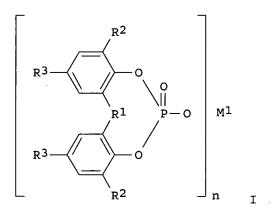
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

L MIN .	CNII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 10053673	A2	19980224	JP 1996-227413	19960808 <
PRAI	JP 1996-227413		19960808	<	
os	MARPAT 128:205520				
GI					



AB Title compns., useful for elec. parts, automobile parts, etc., comprise (A) 100 parts high-crystalline polypropylene-based **resins** [melt flow rate (MFR; measured by JIS K7210) 0.5-300 g/10 min; ΔHm ≥

24.5 + 1.583log(MFR); ΔHm = melting heat quantity determined by DSC], (B) 0.01-5 parts phosphate compds. I (R1 = direct bond, S, C1-9 alkylene or alkylidene; R2-3 = H, C1-8 alkyl; M1 = 1-3-valent metal atom; n = valence number of M1) and/or metal benzoates, and (C) 0.01-1 part metal aliphatic carboxylates. Thus, high-crystalline polypropylene (MFR 20 g/10 min, ΔHm 28) 100, NA-11UF [Na 2,2'-methylenebis(4,6-di-tert-butylphenyl)phosphate] 0.05, and Zn behenate 0.2 parts, were dry-blended, melt-kneaded, and injection-molded to give a test piece showing MFR 23 g/10 min, flexural modulus 22,500 kg/cm2, and Izod impact strength 2.5 kg-cm/cm2, heat distortion temperature 142°, du-Pont impact strength 3.2 kg-cm, and good high-speed moldability.

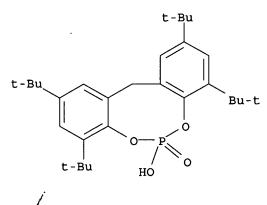
IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tertbutylphenyl)phosphate

RL: MOA (Modifier or additive use); USES (Uses)

(NA-11UF, crystal nucleating agent; propylene polymer compns. containing phosphates and/or metal benzoates and metal aliphatic carboxylates for good heat resistance, wear resistance, and hardness)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)





L87 ANSWER 33 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:526144 HCAPLUS

DN 127:177542

TI Rigid **resin** compositions with good chemical resistance useful for drain pans of washing machine

IN Matsumoto, Yoshifumi; Yoshimura, Teruo

PA Tokuyama Soda Co., Ltd., Japan; Toto Ltd.; Idemitsu Petrochemical Co., Ltd.

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

1	MI.CHI I					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
Р	I JP 09202847	A2	19970805	JP 1996-11287	19960125 <	
	JP 3605461	B2	20041222			
₽	RAI JP 1996-11287		19960125	<		
Δ	B The compas with	good surf	ace aloss	impact resistance and m	moldahility	

contain (a) 100 parts high-crystalline propylene (I)-ethylene (II) block copolymer and (b) 0.01-3.0 parts nucleating agents. Thus, mixing I-II block copolymer [isotactic pentad fraction 0.970%, II content 3.8 weight% melt flow rate (MFR) 15 g/10 min] 100, Al p-butylbenzoate 0.3, hindered phenol antioxidants 0.04, phosphide type antioxidants 0.04, and ivory type pigments 1.3 parts and melt-kneading at 230° gave a pellet showing gloss 84% and MFR 15 g/10 min. Then, the pellet was injection-molded to give the title drain pan showing good impact and chemical resistance. 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate

RL: MOA (Modifier or additive use); USES (Uses)

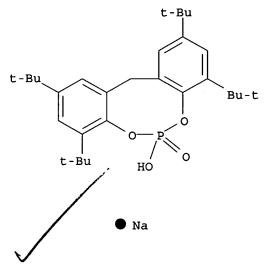
(nucleating agents; high crystalline propylene-ethylene copolymer compns. prepared by using nucleating agents)

RN 85209-91-2 HCAPLUS

IT

CN

12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)



L87 ANSWER 34 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:456569 HCAPLUS

DN 127:66648

TI Crystalline synthetic **resin** compositions with improved mechanical properties and transparency

IN Takahashi, Masayki; Yoshikawa, Kazumi; Takeuchi, Takashi

PA Asahi Denka Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 09118776	A2	19970506	JP 1995-278141	19951025 <
	JP 3630479	B2	20050316		
PRAI	JP 1995-278141		19951025	<	
os	MARPAT 127:66648				
GT					

$$(HO)_{m}M \longrightarrow \begin{pmatrix} R^{3} & & \\ &$$

The compns. with improved heat and yellowing resistance contain (a) crystalline AB synthetic resins 100, (b) acidic cyclic organophosphate esters or metal salts I [R1 = H, C1-4 alkyl; R2, R3 = H, C1-12 alkyl, cycloalkyl, aryl, aralkyl; M = H, alkali metal, alkali earth metal, Al, Zn (m = 0, n = 1 when M = H, alkali metal, n = 1 and m = 1, n = 2 and m = 0 when M = 1divalent metal atom, m = 1 and n = 2 when M = Al)] 0.01-5, and (c)LixMgyAlz(OH)x+2y+3z-2CO3.nH2O(II)(x = 0.5-4.5; y = 0.1-3.0; z =1.0-8.0; n = 0-30) 0.01-5 parts. Thus, polypropylene 100, Ca stearate 0.1, tetrakis [methylene-3-[3,5-di(tert-butyl)-4hydroxyphenyl]propionate]methane 0.1, tris[2,4-di(tert-butyl)phenyl] phosphite 0.1, I (R1 = H, R2, R3 = tert-Bu, M = Na, m = 0, n = 1) 0.15, and II (x = 1.8, y = 0.6, z = 4.0, n = 3.6) 0.15 parts were mixed, pelletized at 250°, and injection-molded to give test pieces showing haze 17.8%, yellowing index 13.5, and good heat resistance. TI85209-91-2

RL: MOA (Modifier or additive use); USES (Uses)
(nucleating agents; crystalline synthetic **resin** compns. containing organophosphates and hydrotalcites giving improved mech. properties and transparency)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

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L87 ANSWER 35 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
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AN 1997:410269 HCAPLUS

DN 127:35027

TI Polypropylene resin compositions and their moldings with improved mechanical strength

IN Takahashi, Masayki; Kono, Toshinori; Takeuchi, Takashi

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

GΙ

TAM.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
			-		
PΙ	JP 09104790	A2	19970422	JP 1995-287996	19951009 <
PRAI	JP 1995-287996		19951009	<	
os	MARPAT 127:35027				

$$(HO) mM \longrightarrow O(O) P \longrightarrow R^2$$

$$R^3 \longrightarrow R^2$$

$$R^3 \longrightarrow R^2$$

$$R^3 \longrightarrow R^2$$

$$R^3 \longrightarrow R^2$$

Title compns. contain 100 parts 95/5-55/45% resin compns. of polypropylene resins and non-crystalline ethylene-propylene copolymer and 0.01-5 parts cyclic organic phosphate metal salts I [R1= H, C1-4 alkyl; R2, R3 = H, C1-12 alkyl, cycloalkyl, aryl, aralkyl; M = alkali metals, alkaline earth metals, Al, Zn; m = 0 and n = 1 (M = alkali metals), n = 1, 2 (M = divalent metals), n = 1 and m = 1 or n = 2 and m = 0, m = 1 and n = 2 (M = Al)]. Title moldings prepared from the above compns. are prevented generation of warp. Thus, blocked polypropylene (BJHH) 70, ethylene-propylene rubber (EP 07) 30, and a phosphate Na salt 0.2 part were mixed, pelletized, and injection molded to give a test piece showing crystallizing temperature 132.0° and warp 0.2 mm.

Ι

IT 85209-91-2

RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(polypropylene compns. containing phosphate metal salts and their moldings with improved mech. strength)

RN 85209-91-2 HCAPLUS

● Na

L87 ANSWER 36 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:360999 HCAPLUS

DN 127:18455

TI Rigid, impact- and heat-resistant propylene polymer compositions

IN Moriya, Masayuki; Sakurai, Kenichi; Okada, Koji

PA Tonen Chemical Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

GI

FAN.	CNT I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 09087451	A2	19970331	JP 1995-273485	19950927 <
PRAI	JP 1995-273485		19950927	<	
OS	MARPAT 127:18455				

$$\begin{bmatrix} R^2 & & & \\ R^3 & & & \\ & R^1 & P-0 & \\ & & & \\ R^2 & & & n & \end{bmatrix}$$

AB The title compns. (MFR 0.5-300 g/10 min) comprise (A) resin component comprising 70-95% polypropylene part having MFR 0.01-1000 g/10 min, DSC heat of fusion $\Delta Hm \geq 24.50 + 1.583\log$ MFR, 30-80% ethylene content, and 5-30% propylene-ethylene copolymer part with limiting viscosity 2-6 dL/g and (B) 0.05-3 phr I or [(p-R4C6H4O)2P(O)0]nM

Ι

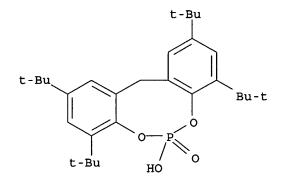
(R1 = direct bond, S, C1-9 alkylene, alkylidene; R2-4 = H, C1-8 alkyl; M = 1-3 valent metal; n = valency of M). An ethylene-propylene copolymer of desired specification given above was prepared, compounded with 0.2 phr NA 11, and injection molded to give a specimen with bending modulus 18,000 kg/cm2, Izod impact strength 5.5 kg-cm/cm, and heat distortion temperature 126° .

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); USES (Uses) (rigid, impact- and heat-resistant propylene polymer compns.)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)



● Na

L87 ANSWER 37 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:360998 HCAPLUS

DN 127:18454

TI Rigid, impact- and heat-resistant propylene polymer compositions

IN Moriya, Masayuki; Sakurai, Kenichi; Okada, Koji

PA Tonen Chemical Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09087449	A2	19970331	JP 1995-273484	19950927 <
PRAI	JP 1995-273484		19950927	<	
os	MARPAT 127:18454				
GI					

The title compns. (MFR 0.5-300 g/10 min) comprise (A) resin component comprising 70-95% polypropylene part having MFR 0.01-1000 g/10 min, DSC heat of fusion ∆Hm ≥ 24.50 + 1.583log MFR, 30-80% ethylene content, and 5-30% propylene-ethylene copolymer part with limiting viscosity 2-6 dL/g, (B) 0.05-3 phr I or [(p-R4C6H4O)2P(O)O]nM (R1 = direct bond, S, C1-9 alkylene, alkylidene; R2-4 = H, C1-8 alkyl; M = 1-3 valent metal; n = valency of M), and (C) 0.01-0.5 phr [Al2Li(OH)6]nX.mH2O (X = anion; n = valency of X; m ≤3). An ethylene-propylene copolymer of desired specification given above was prepared, compounded with 0.2 phr NA 11 and 0.05 phr Mizukalac, and injection molded to give a specimen with bending modulus 18,800 kg/cm2, Izod impact strength 5.5 kg-cm/cm, and heat distortion temperature 126°.

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); USES (Uses)
(rigid, impact- and heat-resistant propylene polymer compns.)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 38 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:334712 HCAPLUS

DN 127:5766

TI Crystalline thermoplastic resin compositions

PA Mitsui Petrochemical Industries, Ltd., Japan; Arakawa Chemical Industries, Ltd.

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 09071729	A2	19970318	JP 1995-231246	19950908 <
PRAI	JP 1995-169087	Α	19950704	<	

OS MARPAT 127:5766

AB The title compns. contain crystalline thermoplastic resins 100, crystal nucleating agents of rosin acid partial metal salts 0.001-5, and other nucleating agents 0.001-5 parts. Thus, a test piece contained polypropylene 100, Irganox 1010 0.1, Ca stearate 0.1, and dehydroabietic acid 15% K 15% Na salt 0.1, and Gelall MD 0.1 part.

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); USES (Uses)
(nucleating agents; thermoplastic resins containing rosin acid
nucleating agents and other nucleating agents)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

L87 ANSWER 39 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:174826 HCAPLUS

DN 126:172375

TI Polypropylene **resin** molding compositions with good balance of stiffness, transparency and resistance to heat, impact and whitening

IN Udagawa, Hiroyuki; Okada, Koji

PA Tonen Kagaku Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

jan delaval - 18 october 2005

PI JP 09003293 A2 19970107 JP 1995-171583 19950615 <--

PRAI JP 1995-171583 19950615 <--

OS MARPAT 126:172375

AB The compns. useful for molding into containers, automobile parts, etc. (no data), comprise 100 parts (a) block copolymers having 95-70 parts crystalline polypropylene (I) block and 5-30 parts ethylene-propylene copolymer (II) block, or (b) a 95-70:5-30 mixture of I and II, 0.01-3.0 parts phosphoric acid (optionally p-C1-9 alkyl-substituted) di-Ph or bisphenyl ester salts with metals having valency of 1-3, and 0.01-0.5 part [Al2Li(OH)6]nX·mH2O (M = organic or inorg. anion; n = valency of X; m = 0-3). Thus, an (a)-type block ethylene-propylene copolymer was prepared by a 2-step polymerization using solid catalyst containing Mg and Cl ions, Et3Al

cocatalyst and dimethyldiphenylsilane as usual, mixed (100 parts) with Na 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate 0.1, Mizukalac 0.05, 2,6-di-tert-butyl-4-methylphenol 0.18, distearyl thiopropionate 0.08, and tetrakis[methylene(3,5-di-tert-butyl-4-hydroxyhydrocinnamato)]methane 0.04%, kneaded, pelletized and injection molded to give moldings with haze 38.3%, flexural modulus 12,400 kg/cm2 and duPont impact strength (at -20°, 1 mm) 27.2 kg/cm.

IT 85209-91-2, Sodium 2,2'-Methylenebis(4,6-di-tert-butylphenyl) phosphate

RL: MOA (Modifier or additive use); USES (Uses)
(heat stabilizer/antioxidant; polypropylene resin molding compns. with good balance of stiffness, transparency and resistance to heat, impact and whitening)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

L87 ANSWER 40 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:116319 HCAPLUS

DN 126:144972

TI Polypropylene resin composition containing phosphates

IN Udagawa, Hiroyuki; Okada, Koji

PA Tonen Kagaku Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese FAN. CNT 1

-	ANT. CIVI I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
P	PI JP 08311295	A2	19961126	JP 1995-145194	19950522 <
P	PRAI JP 1995-145194		19950522	<	
0	S MARPAT 126:144972				
G	I		•		

AB Compns. with good rigidity, impact resistance, heat resistance, transparency, and whitening resistance comprise 100 parts ethylene-propylene block copolymer and 0.01-3.0 parts phosphate compound The ethylene-propylene block copolymer comprises 70-95 parts crystalline propylene polymer and 5-30 parts ethylene-propylene copolymer, and has ethylene content 3-22%, melt flow rate 0.3-100 g/10 min, cold xylene sols. 2.5-20.0%, ethylene content of cold xylene-soluble and acetone-insol. fraction 40-80%, ratio of limiting viscosity of the cold xylene insols. to the cold xylene-sols. 0.4-2.0, and microfusion peak 118-130°. The phosphates comprise I or II, where R1 is a direct bond, S, or C1-4 alkylene, R2, R3 are H, C1-8 alkyl, M is a metal of 1-3 valence, n is 1-3, R4 is H or C1-8 alkyl, M' is a metal of 1-3 valence, n' is 1-3. An composition contained ethylene-propylene block copolymer and sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl)phosphate.

IT 85209-91-2, Sodium 2,2'-methylenebis (4,6-di-tert-

butylphenyl) phosphate

RL: MOA (Modifier or additive use); USES (Uses) (polypropylene resin composition containing phosphates)

RN 85209-91-2 HCAPLUS



L87 ANSWER 41 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:618697 HCAPLUS

DN 125:255087

TI Optical fiber cores with polymer coatings for low light transmitting loss

IN Oosada, Koji; Murayama, Hitoshi; Ito, Mitsuo; Shiono, Takeo

PA Showa Electric Wire & Cable Co, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08208278	A2	19960813	JP 1995-15296	19950201 <
PRAI	JP 1995-15296		19950201	<	

The optical fiber cores are coated with a 1st coating layer (e.g., silicone) and then coated with a 2nd coating layer having a higher Young's modulus than that of the 1st coating layer, and the 2nd coating layer is a crystalline resin dispersed with nucleating agents which have higher m.p. than that of crystalline resin. The crystalline resin is a thermoplastic resin, and the content of the nucleating agent is 0.1-5 weight parts based on 100 weight parts of crystalline resin. The coated optical fiber cores have low light transmitting loss.

IT 85209-91-2

RL: TEM (Technical or engineered material use); USES (Uses) (nucleating agent; optical fiber cores with polymer coatings for low light transmitting loss)

RN 85209-91-2 HCAPLUS

dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

L87 ANSWER 43 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:248213 HCAPLUS

DN 124:345449

TI Resin cleaning agents for molding machines

IN Mihara, Masami; Hata, Shigemi

PA Idemitsu Petrochemical Co, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	C1.1 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 08027335	A2	19960130	JP 1994-164109	19940715 <
	JP 3476028	B2	20031210		
DDAT	TD 1994-164109		19940715	/	

The agents contain (A) syndiotactic styrene-based polymers with average mol. weight (Mw) 10 x 104-60 x 104 and optional 20-80 parts copolymers comprising 84-99% aromatic vinyl compds. and 1-16% unsatd. dicarboxylic acid anhydrides, (B) surfactants 0.5-20, and (C) crystal nucleation agents and optional inorg. fillers 0.1-30 parts. Thus, syndiotactic polystyrene (Mw 10 x 104) 100, Denon 2035 (nonionic surfactant) 10, NA 11 0.5 part were melt-kneaded to obtain a cleaning agent.

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(resin cleaning agents containing polystyrene, surfactants, nucleation agents)

RN 85209-91-2 HCAPLUS

MARPAT 124:234000

GI

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L87 ANSWER 44 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
    1996:179106 HCAPLUS
DN
    124:234000
    Crystalline synthetic resin compositions
ΤI
IN
    Haruna, Tooru; Takahashi, Masayuki; Shibazaki, Junji
PA
    Asahi Denka Kogyo KK, Japan
so
    Jpn. Kokai Tokkyo Koho, 11 pp.
    CODEN: JKXXAF
DT
    Patent
    Japanese
LA
FAN.CNT 1
    PATENT NO.
                       KIND
                              DATE
                                          APPLICATION NO.
                                                                DATE
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                                          -----
                              -----
                                                                _____
PΙ
    JP 08003364
                        A2
                              19960109
                                          JP 1994-156690
                                                                19940615 <--
PRAI JP 1994-156690
                              19940615 <--
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The compns. with transparency and good mech. properties contain crystalline synthetic resins 100, dibenzylidene sorbitols I 0.01-5, and aromatic organic phosphate metal salts II or III (R1-5 = H, C1-4 alkyl; R6-10 = H, C1-12 alkyl; M1-2 = alkali metal, alkaline earth metal, Zn, Al; p = 1, 2; if M1-2 = alkali metal, alkaline earth metal, or Zn, q = 0; if M1-2 = Al, q = 1, 2) 0.01-5 parts. Thus, polypropylene 100, tetrakis[methylene-3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]methane 0.1, tris(2,4-di-tert-butyl) phosphite 0.1, calcium stearate 0.1, I (R1-4 = Me) 0.1, and II (R5-7 = tert-butyl; M = Na; p = 1) 0.01 part were mixed to obtain a test piece showing good transparency and mech. properties.

IT 151367-62-3

RL: MOA (Modifier or additive use); USES (Uses)
(sorbitol- and phosphate metal salt-containing crystalline synthetic

resin compns. with transparency and mech. properties)

RN 151367-62-3 HCAPLUS

L87 ANSWER 45 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:101025 HCAPLUS

DN 124:147881

TI Heat- and impact-resistant polypropylene resin compositions

IN Watanabe, Kazuyuki; Iwamoto, Tomoshi; Yanagihara, Hisayoshi

PA Showa Denko Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
					-
ΡI	JP 07316357	A2	19951205	JP 1994-115619	19940527 <
	JP 3398469	B2	20030421		
PRAT	JP 1994-115619		19940527	<	

The title compns. useful for automobile parts, elec. devices and packaging comprise (A) polypropylene (I) with xylene insol. fraction (Xin) at 25° ≥98.0%, isotactic pentad ratio (P) 96.5%, isotactic average continuous chain length (N) ≥ 90 , and total contents (Nf) of fractions having N \geq 300 as measured by column chromatog. method of ≥10%, and (B) 0.1-40 parts (per 100 parts A) HDPE and/or (C) 0.05-20% (based on the compns.) nucleating agents. Thus, propylene (II) was prepolymd. at 0-5° in heptane in the presence of Et3Al, dicyclopentyldimethoxysilane (III), and a catalyst prepared from (a) MgCl2, EtOH, TiCl4, and diisobutyl phthalate (IV), (b) TiCl4 and IV, and (c) TiCl4 to give a prepolymer. II was polymerized at 70° in the presence of the prepolymer, Et3Al, III, and IV at 70° to give I with MFR 34.2 g/10 min, Xin 99.5%, P 99.5%, N 836, and Nf 100%, 100 parts of which was blended with 10 parts HDPE, di-tert-butyl-p-cresol 0.05, pentaerythrityl tetrakis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate] 0.10, and Ca stearate 0.10%, pelletized, and injection molded to give test pieces having the claimed properties.

IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl)
phosphate

RL: MOA (Modifier or additive use); USES (Uses)

(nucleating agent; in polyolefin compns. for molding with good heat and impact resistance)

RN 85209-91-2 HCAPLUS

L87 ANSWER 46 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:99474 HCAPLUS

DN 124:291634

TI Transparent polypropylene resin films and stabilized compositions for their manufacture

IN Komaki, Koichi; Morita, Keita

PA Nippon Petrochemicals Co., Ltd., Japan; Aipetsuku Kk

SO Jpn. Kokai Tokkyo Koho, 22 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 07309961	A2	19951128	JP 1994-127139	19940518 <
	JP 3402754	B2	20030506		
PRAI	JP 1994-127139		19940518	<	

AB The title films having good gloss and appearance are manufactured by a continuous process in which a resin melt is extruded from T-die, pressed by cast roll and endless belt and annealed prior to reaching a taking-up roll where the resin melt contains polypropylene resins 100, P compound- or/and hindered phenolic compound-type antioxidants 0.01-0.5, nucleating agents 0.02-1.0, and optionally acid scavengers 0.01-0.5 parts. A film was prepared in this manner from a polypropylene 100, Irgafos 168 0.15, Irganox 0.05, Gel All MD (nucleating agent) 0.1 and Ca stearate 0.1 part.

IT 85209-91-2, ADK Stab NA 11

RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)

(transparent films and stabilized compns. for manufacture)

RN 85209-91-2 HCAPLUS

L87 ANSWER 47 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:56445 HCAPLUS

DN 124:147824

TI Crystalline synthetic resin compositions with improved transparency and physical properties

IN Haruna, Tooru; Nishina, Takao; Takeuchi, Takashi

PA Asahi Denka Kogyo KK, Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

-111 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07278448	A2	19951024	JP 1994-101570	19940415 <
JP 3369718	B2	20030120		
JP 1994-101570		19940415	<	
	PATENT NO. JP 07278448 JP 3369718	PATENT NO. KIND	PATENT NO. KIND DATE JP 07278448 A2 19951024 JP 3369718 B2 20030120	PATENT NO. KIND DATE APPLICATION NO. JP 07278448 A2 19951024 JP 1994-101570 JP 3369718 B2 20030120

OS MARPAT 124:147824

GI For diagram(s), see printed CA Issue.

AB The compns. contain 0.01-5 phr ≥1 polyol metal salts I (A = 3-6-valent alc. residue; M = alkaline earth metal, Zn; m = 0-4; n = 1-3) and 0.01-5 phr ≥1 aromatic phosphoric acid ester metal salts. Thus, polypropylene 100, tetrakis[methylene-3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionato]methane 0.1, tris(2,4-di-tert-butylphenyl) phosphite 0.1, Ca stearate 0.1, a phosphate II 0.1, and Zn glycerolate 0.2 part were blended, pelletized, and molded to give a test piece showing haze 15.8%/1-mm, bending strength 428 kg/cm2, flexural modulus 12,500 kg/cm2, and crystallization temperature 136°.

IT 85209-91-2

RL: MOA (Modifier or additive use); USES (Uses)
(polyol metal salts and aromatic phosphate esters for improved transparency and phys. properties of crystalline polymers)

RN 85209-91-2 HCAPLUS

CN

L87 ANSWER 48 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN AN1996:39560 HCAPLUS DN 124:147713 Effect of an organophosphorus salt type nucleating agent on filled ΤI polypropylene Fukushima, M.; Tobita, E.; Haruna, T. ΑU CS Polymer Additives & Resins Lab., Asahi Denka Kogyo K.K., Japan SO Annual Technical Conference - Society of Plastics Engineers (1995), 53rd(Vol. 3), 3581-6 CODEN: ACPED4; ISSN: 0272-5223 PB Society of Plastics Engineers DTJournal LAEnglish Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate was an AB effective nucleating agent for propylene homo- and copolymers filled with 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) IT phosphate RL: MOA (Modifier or additive use); USES (Uses) (crystal nucleating agents for talc-filled propylene polymers) RN 85209-91-2 HCAPLUS

12H-Dibenzo [d, g] [1,3,2] dioxaphosphocin, 2,4,8,10-tetrakis(1,1-

dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

ANSWER 49 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN L87

AN 1995:947319 HCAPLUS

DN 124:31665

Propylene-based resin compositions for caps of beverage ΤI

Kawai, Shigenobu; Osegaki, Kimiho; Sakurai, Hideo; Yada, Noryuki IN

PΑ Mitsubishi Kagaku KK, Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

Japanese LA

FAN CNT 1

1711. CH 1							
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
PI JP 07238204	A2	19950912	JP 1994-32536	19940302 <			
JP 3366416	B2	20030114					
PRAI JP 1994-32536		19940302	<				

19940302 <--The compns. comprise (A) 100 parts propylene-ethylene block copolymers with melt-flow rate (MFR) 1-50 g/10-min, consisting of (a) 88-95% crystalline polypropylene with MFR 5-100 g/10-min and d. ≥0.9070 g/cm3 and (b) 5-12% propylene-ethylene block copolymers containing 30-60% ethylene with MFR 0.001-1 q/10-min, which are manufactured through multistep (≥2) processes using organic Al compds. and support-type solid catalysts containing Mg, Ti, halogens, and electron donors, (B) 0.01-5 parts cyclic phosphate esters, (C) 0.1-5 parts nonionic surfactants, and (D) Ti oxide-based pigments. Thus, propylene was treated at 75° for 318 min in the presence of a support-type solid catalyst [manufactured from Me H siloxane, MgCl2, Ti(OBu)4, and TiCl4], followed by treating with ethylene and propylene at 60° for 53 min to give a block copolymer, 100 parts of which was blended with Na 2,2'-methylenebis(4,6-di-tertbutylphenyl)phosphate 0.2, Electrostripper TS 5 0.5, TiO2 1, a phenolic antioxidant 0.05, and a neutralizer 0.05 part then molded to give test pieces showing flexural modulus 16,000 kg/cm2, Izod impact strength (23°) 7.5 kg-cm/cm2 and good heat resistance and low smelling.

TT 85209-91-2

> RL: FFD (Food or feed use); MOA (Modifier or additive use); PRP (Properties); BIOL (Biological study); USES (Uses) (nucleating agent; propylene-based resin compns. for caps of beverage containers)

85209-91-2 HCAPLUS RN

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

$$\begin{bmatrix} R^1 & & & & \\ R^2 & & & & \\ & & & & \\ X & & P-O-M & \\ & & & \\ R^2 & & & \\ & & & \\ R^1 & & & & \\ \end{bmatrix}_{n=1}^{R}$$

AB The coatings consist of a polybutylene terephthalate resin

jan delaval - 18 october 2005

composition containing 0.05-3 weight parts of cyclic organic phosphate metal salt (I)

with respect to 100 weight parts of the polybutylene terephthalate with relative viscosity 2.2-3.3, where R1 and R2 is H atom, alkyl group, aryl-alkyl group, aryl group, or alkyl-aryl group resp., X is direct bond, alkylidene group, or S, M is a metal atom, and n is the atomic valency of the metal. The coatings have good elasticity and high-temperature mech. properties.

IT 85209-91-2, MARKNA-11

RL: MOA (Modifier or additive use); USES (Uses)
(primary coatings containing polybutylene terephthalate and cyclic organic phosphate metal salt for optical fibers for elasticity and mech. property)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 51 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:780574 HCAPLUS

DN 123:342688

TI Crystalline polypropylene-type **resin** compositions for gas injection molding and molding process

IN Katsube, Toraichi; Kakihara, Ichiro; Mori, Juki

PA Asahi Chemical Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 07138421 A2 19950530 JP 1993-289143 19931118 <-PRAI JP 1993-289143 19931118 <--

AB The title compns., having crystallization initiating temperature ≥75° in cooling rate 150°/min, contain (a) 100 parts mixts. of 60-80% crystalline propylene-based polymers having melt flow rate (MFR) ≥3 g/10 min, 3-30% ethylene-propylene rubber, ethylene-1-butene rubber, and butadiene-styrene (block) rubber, and 5-30% talc with average particle size (P) ≤5 μm and (b) 0.01-3 parts crystallization-accelerating organic compds. The components are fused, subjected to injection into cavity and to gas

injection optionally associated with the fused **resins** to give hollow moldings. Thus, 7:93 ethylene-propylene block copolymer (MFR 6 g/10 min) 80, EP 07P 15, and talc (P 2 μm) 5 parts were mixed to give title composition, which was subjected to gas injection molding to give a hollow test piece showing flexural modulus 13,500 kg/cm2, Izod impact resistance 8 kg-cm/cm at -30°, and crystallization initiation temperature 76°.

IT 85209-91-2, Mark NA 11

RL: MOA (Modifier or additive use); USES (Uses)

(crystallization agents; crystalline propylene polymers containing rubbers, crystallization

agents, and talc for gas injection molding)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 52 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:403487 HCAPLUS

DN 122:189399

TI Transparent propylene polymer compositions with good dispersibility of nucleators

IN Kato, Yoshinao; Kimura, Masao

PA Shinnittetsu Kagaku, Japan; Shinnippon Seitetsu KK

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. APPLICATION NO. KIND DATE DATE ----______ ------**-**----JP 06322195 A2 JP 1993-111995 PΙ 19941122 19930514 <--PRAI JP 1993-111995 19930514 <--

AB Title compns., useful for packaging materials and vessels, contain 80-100 parts propylene polymers, 0.005-3.0 parts metal salts of aromatic phosphoric acids as nucleators, and 2-20 parts aliphatic or alicyclic hydrocarbon resins [softening point (A) 70-160°]. Thus, RB 410 (polypropylene) 93, ADK Stab NA 11 [Na 2,2-methylenebis[4,6-di(tert-butyl)phenyl]phosphate] 0.3, a hydrogenated coumarone-indene resin (hydrogenation degree 99%, A 100°) 7, and Irganox 1010 0.1 part were mixed, pelletized at 210°, and injection molded at 220°

and 50 kg/cm2 to give a 1.2-mm test piece showing haze 20%.

IT 85209-91-2, ADK Stab NA 11

RL: MOA (Modifier or additive use); USES (Uses)

(nucleators; transparency-improved propylene polymer blends with good dispersibility of nucleators)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 53 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:246600 HCAPLUS

DN 122:11550

TI Crystalline synthetic **resin** compositions with improved transparency and mechanical properties

IN Kimura, Ryoji; Tuboi, Tetuo; Nishikawa, Kazunori

PA Asahi Denka Kogyo Kabushiki Kaisha, Japan

SO U.S., 8 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

FAN.CNT 3				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5342868	Α	19940830	US 1993-26479	19930304 <
JP 05156078	A2	19930622	JP 1991-322153	19911205 <
JP 3046428	B2	20000529		
ES 2118847	Т3	19981001	ES 1993-105144	19930329 <
PRAI JP 1991-322	153 A	19911205	<	
EP 1993-105	144 A	19930329	<	
GT				

$$X-M-Q-P=Q CH-R^{1}$$

$$R^{3}$$

$$Q-P=Q CH-R^{1}$$

$$R^{2}$$

$$R^{3}$$

$$R^{2}$$

$$R^{2}$$

$$R^{3}$$

AB The compns. comprise 100 parts a crystalline synthetic **resin** (such as ethylene-propylene copolymer) compounded with 0.01-5 part ≥1 alkali metal carboxylates, alkali metal β-diketonates and alkali metal salts of β-ketoacetic esters, and 0.01-5 part I [R1 = H, C1-4 alkyl; R2, R3 = H, C1-12 alkyl; M = Group III or IV metal; X = OH when M represents a Group III metal; X = O or (OH)2 when M represents a Group IV metal]. The compns. can be used for packaging materials, and coated molded articles.

IT 85209-91-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with aluminum trichloride)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 54 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:219451 HCAPLUS

DN 122:11230

TI Nucleating agents for plastics

AU Takahashi, Masayuki

CS Asahi Denka Kogyo K. K., Tokyo, 116, Japan

SO Purasuchikkusu (1994), 45(11), 73-5 CODEN: PRSKAW; ISSN: 0555-7887 DT Journal; General Review

LA Japanese

AB A review with 5 refs. Morphol. of an ADK Stab NA 11-containing polypropylene sheet and improvement of heat resistance, rigidity, transparency, and moldability of polypropylene by the crystal nucleating agent are described.

IT 85209-91-2, ADK Stab NA 11

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (morphol. and properties of crystal nucleating agent-containing polypropylene)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

● Na

L87 ANSWER 55 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:657129 HCAPLUS

DN 121:257129

TI Polyester blends having thermally stable transparency

IN Okamoto, Tomohiro; Taniguchi, Toshiro

PA Kuraray Co, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
PI JP 06107930 A2 19940419 JP 1992-256467 19920925 <--

PRAI JP 1992-256467 19920925 <--

The title blends useful for molding are obtained from a crystalline poly(butylene terephthalate) resin having heat of crystallization (ΔH; as measured by cooling a melt of 290° at a rate of 10°/min) ≥30 J/g, an amorphous polyester of 1,4-cyclohexanedimethanol (I), ethylene glycol (II), terephthalic acid (III) and other dicarboxylic acids, and phosphates PO4MR1R2 (M = alkali metal; R1,2 = Ph bearing a tert-alkyl group on para-position, and ≥1 alkyl group on ortho-positions; 2 of ortho-substituting groups of R1 and R2 can be linked by a CH2 group). A blend of 1,4-butanediol-(di-Me isophthalate-di-Me terephthalate 10:90 mixture) copolymer (ΔH 42 J/g) 75, I-II-III copolymer 25, and Na

2,2-methylenebis(4,6-di-tert-butylphenyl) phosphate 0.01 part gave an injection molding with good transparency.

IT 85209-91-2

RL: USES (Uses)

(stabilizers, for crystalline and amorphous polyester blends)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 56 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:632323 HCAPLUS

DN 121:232323

TI Heat- and impact-resistant syndiotactic polystyrene compositions with good mechanical properties

IN Okada, Akihiko; Mihara, Masami; Takamatsu, Keiji

PA Idemitsu Kosan Co, Japan

SO Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 06116454	A2	19940426	JP 1992-268770	19921007 <
PRAI	JP 1992-268770		19921007	<	

The compns., having improved adhesion with inorg. fillers and good compatibility with other resins, contain (A) syndiotactic styrene polymers, (B) a rubbery elastomer, (C) a thermoplastic resin bearing polar group and having good compatibility with A, (D) surface-treated inorg. fillers, (E) nucleating agents, and (F) acidic or basic catalysts for the reaction of C and D. Molding syndiotactic polystyrene 58, maleated styrene-p-methylstyrene copolymer 5, Kraton G 1651 7, Na methylenebis(2,4-di-tert-butylphenyl) acid phosphate (NA 11) 0.5, Al distearate 0.5, antioxidants 0.2, aminosilane-treated glass fibers 30 parts gave test pieces having notched Izod impact strength 12.5 kJ/m2, and heat distortion temperature (18.5 kg) 258°.

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); USES (Uses) (nucleating agent; heat- and impact-resistant syndiotactic polystyrene compns. with good mech. properties)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 57 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:484956 HCAPLUS

DN 121:84956

TI Polypropylene resin compositions with good mechanical strength and flexibility

IN Yamamoto, Yasushi; Kitajima, Yoshuki

PA Tokuyama Soda Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

1111.011 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 06093166	A2	19940405	JP 1992-242088	19920910 <
JP 3151064	B2	20010403		
PRAT JP 1992-242088		19920910	<	

AB The title compns. comprise 100 parts organic peroxide-decomposition products of propylene (I) block copolymers with weight-average mol. weight (Mw) ≥600,000 and containing ≤1.0% components with mol. weight ≤10,000 (component A) composed of 0.01-5% polybutene components, 1-70% polypropylene components, and 25-98.99% (15-80):(85-20) mol ratio ethylene (II)-I random copolymer components, and 0.05-2 parts nucleating agents. Thus, 1-butene, I, and II were polymerized in multi steps in the presence of TiCl3 and organic Al

compds. to give a block copolymer with Mw = 190 + 104 containing polybutene component 0.19%, polypropylene component 14%, and II 38 mol%, and component A 0.3%., 30 kg of which was mixed with 0.20 part (per 100 resin) 1,3-bis(tert-butylperoxyisopropyl)benzene and 0.30 part (per 100 resin) Al p-tert-butylbenzoate, then melt kneaded, pelletized, then injection molded to give test pieces, which showed flexural modulus 930 kg/cm2, tensile strength 114 kg/cm2, and Vicat softening temperature 83°.

IT 85209-91-2

RL: USES (Uses)

(nucleating agents, propylene block copolymer compns. containing)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 58 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:437020 HCAPLUS

DN 121:37020

TI Vinyl chloride resin compositions for films

IN Kamitsubara, Yuzuru

PA Chisso Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06073254	A2	19940315	JP 1992-248565	19920825 <
DRAT	TD 1992-248565		19920825	/	

AB The title compns., useful for transparent films with good modulus, rigidity, and feel, contain 100 parts PVC, 0.07-10 parts compds. selected from aryl phosphates, benzylidene sorbitol, and benzoate hydroxy metal salts, and optionally 1-200 parts plasticizers. A mixture of PVC (d.p. 1300) 100, DOP 48, Ca-Zn stabilizer 2.0, and tricresyl phosphate 5.0 parts was roll kneaded to give a 0.075-mm film showing maximum curvature torque 1.1 g-cm, 1% tensile modulus 1.65 kg/mm2, and haze 4.2%.

IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate

RL: USES (Uses)

(PVC compns. containing, for transparent films with good modulus, ADK Stab NA 11UY)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 59 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:271944 HCAPLUS

DN 120:271944

TI A new organophosphorous type nucleating/clarifying agent for polypropylene

AU Haruna, T.; Tobita, E.

CS Asahi Denka Kogyo K.K., Urawa, 336, Japan

SO Annual Technical Conference - Society of Plastics Engineers (1992), 50th(2), 2029-34
CODEN: ACPED4; ISSN: 0272-5223

DT Journal

LA English

AB Alkali metal and alkaline earth 2,2'-methylenebis(4-alkylphenyl) phosphate mixts. with polypropylene (I) were extruded, molded, and studied to examine the nucleating/clarifying efficiency of the salts. The presence of these salts in I improved clarity and phys. properties, and the efficiency depended on both the metal ions and substituents of the salts. The salts with alkyl being Bu were the most suitable, and Na 2,2'-methylenebis-4-butylphenyl phosphate increased crystalline temperature and heat-deflection temperature of I more than other salts and improved stiffness and transparency of I.

IT 85209-91-2, ADK Stab NA 11

RL: PRP (Properties)

(nucleating/clarifying agents, for polypropylene, thermal and mech. properties and transparency in relation to)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 60 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1993:148774 HCAPLUS

DN 118:148774

TI Lightweight **resin** compositions and automotive interiors using the same

IN Kawamura, Takanobu; Sudo, Masahiro; Chiku, Shinji; Oka, Takahiro; Umemoto, Yoshiro; Iwakiri, Masaji; Aozuka, Kazunori

PA Chisso Corp., Japan; Toyota Motor Corp.

SO Jpn. Kokai Tokkyo Koho, 10 pp.

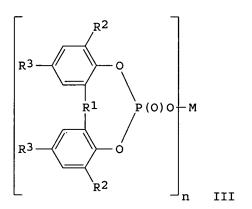
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND DATE		APPLICATION NO.	DATE
ΡI	JP 04270753	A2	19920928	JP 1991-53979	19910226 <
PRAI	JP 1991-53979		19910226	<	
CIT					



AB The title compns. having good rigidity, high-temperature rigidity, and impact strength comprise (1) stepwise-polymerized highly crystalline ethylene-propylene

block copolymer with specified composition parameters and flow properties, (2) 0-10% ethylene-propene rubber (40-60% ethylene) with Mooney viscosity (100°) <50, (3) 10-16% superfine talc (diameter 1.5-0.1 μm , $>4-\mu m$ content $\leq 4\%$), and (4) 0.01-1% (based on 1 + 2 + 3) phosphate I (R1 = direct bond, S, C1-4 alkylidene; R2, R3 = H, C1-8 alkyl; M = metal; n = 1-3), with overall melt flow rate \geq 20. Na 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate was used as I. IT 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate RL: USES (Uses) (lightwt. polyolefin compns. containing talc and, rigid, impact-resistant, for automotive interiors) 85209-91-2 HCAPLUS RΝ 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-CN dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

ANSWER 61 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN L87 AN 1992:471005 HCAPLUS DN 117:71005 TI Crystalline synthetic resin compositions IN Haruna, Toru; Hida, Etsuo; Takeuchi, Takashi PA Asahi Denka Kogyo K. K., Japan SO Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF DT Patent Japanese LA FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----ΡI JP 04055472 A2 19920224 JP 1990-166415 19900625 <--JP 2919564 B2 19990712 PRAI JP 1990-166415 19900625 <-os MARPAT 117:71005 GI

AB The title compns. with improved workability, strength, transparency, etc., are obtained by adding 0.005-5 parts alkali metal salts of alkylidene bisphenol cyclic phosphates I (R1 = H, C1-4 alkyl; R2 = H, C1-9 alkyl; M = alkali metal) and 0.005-5 parts microgranular silicic acid anhydride having average size ≤1 μm to 100 parts crystalline synthetic resins. Thus, a propylene copolymer 100, tetrakis[methylene-β-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]methane 0.1, tris(2,4-di-tert-Bu phenyl)phosphite 0.1, Ca stearate 0.05, Aerosil 200 (average size 12 nm) 0.1, and I (R1 = H, R2 = CMe3, M = Na) 0.2 part were blended, pelletized, and molded to give a test piece having haze value 6% and Izod impact strength 6.1 kg-cm/cm2.

IT 85209-91-2

RL: USES (Uses)

(crystalline **resins** containing, for workability and strength and transparency)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 62 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:449903 HCAPLUS

DN 117:49903

TI Stabilized polyolefin resin compositions

IN Haruna, Toru; Takahashi, Masayuki; Takeuchi, Takashi

PA Asahi Denka Kogyo K. K., Japan

I

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 03217441	A2	19910925	JP 1990-12124	19900122 <
	JP 2791704	B2	19980827		
	JP 1990-12124		19900122	<	
CT					

$$R^{4}OP$$
 R^{2}
 R^{2}
 R^{2}
 R^{2}

AB Transparent title compns. with good stability to heat and radiation contain 0.001-10 parts cyclic phosphites I (R1 = Me3C, tertiary amyl; R2 = C1-9 alkyl; R3 = H, C1-4 alkyl; R4 = C1-30 alkyl) and 0.01-5 parts aromatic phosphate metal salts, dibenzylidenesorbitols, and/or aromatic carboxylic acid Al salts (based on 100 parts polyolefins). Thus, 100 parts polypropylene was mixed with tetrakis[methylene-3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionato]methane 0.1, Ca stearate 0.05, 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate Na salt 0.1, and I (R1 = R2 = CMe3, R3 = H, R4 = Me) 0.1 part, extruded at 250°, pelletized, then injection molded at 250° to give test pieces, which showed thermal stability at 160° 354 h, and yellowing degree after 72-h irradiation by luminescent lamp 7.4.

IT 85209-91-2

RL: USES (Uses)

(polyolefin compns. containing cyclic phosphites and, for good stability to heat and radiation)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

● Na

L87 ANSWER 63 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:123872 HCAPLUS

DN 114:123872

TI Styrene resin molding compositions

IN Nakano, Akikazu; Sumitomo, Takashi

PA Idemitsu Kosan Co., Ltd., Japan

SO Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PA.	TENT NO.		KIND	DATE	APPLICATION NO.	DATE
ΡI	ΕP	382064		A1	19900816	EP 1990-101857	19900131 <
	ΕP	382064		B1	19971126		
		R: AT, BE,	CH,	DE,	ES, FR, GB,	IT, LI, NL, SE	
	JP	02202939		A2	19900813	JP 1989-22587	19890202 <
	JP	2812972		B2	19981022		
	ΕP	779329		A2	19970618	EP 1997-103074	19900131 <
	ΕP	779329		A 3	19971229		
	ΕP	779329		B1	20010509		
		R: AT, BE,	CH,	DE,	ES, FR, GB,	IT, LI, NL, SE	
	AT	160578		E	19971215	AT 1990-101857	19900131 <
	AT	201034		E	20010515	AT 1997-103074	19900131 <
	US	5034441		Α	19910723	US 1990-559971	19900727 <
PRAI	JP	1989-22587		Α	19890202	<	
	US	1990-470975		B2	19900126	<	
	EΡ	1990-101857		A 3	19900131	<	

AB Molding compns. with good mold release, gloss, bending strength and modulus, and heat resistance contain syndiotactic styrene polymers 100, nucleating agents (organic P compds., soaps) 0.01-15, and polyoxyaklylenes and/or fatty acids or derivs. 0.01-15 parts. Thus, a blend of syndiotactic polystyrene (I) 100, pentaerythritol bis[(2,6-di-tert-butyl-4-methylphenyl) phosphite] 0.7, BHT 0.1, and polyoxyethylene di-Me ether 4 parts had good mold release, gloss 100%, bending strength 1010 kg/cm2, bending modulus 41,000 g/cm2, and Vicat temperature 245°; vs. poor 60, 890, 37,400, and 224, resp., for I alone.

IT 85209-91-2

RL: USES (Uses)

(nucleating agents, for syndiotactic styrene polymer moldings)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 64 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:499071 HCAPLUS

DN 113:99071

TI Crystalline polymers containing alkali metal bisphenol cyclic phosphates

IN Haruna, Toru; Takahashi, Masayuki; Takeuchi, Takashi

PA Adeka Argus Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

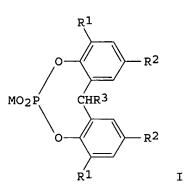
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

1.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI PR GI	AI JP 1988-225789	A2	19900313 19880909	JP 1988-225789	19880909 <



AB Transparent and impact-resistant title compns. contain 100 parts crystalline polymers and 0.005-5 parts bisphenol cyclic phosphate salts I (R1-2 = C1-9 alkyl; R3 = H, C1-4 alkyl; M = alkali metal) having average particle size (P)

 $\leq \! 10~\mu m.$ Thus, a composition comprising Profax 6501 100, Ca stearate 0.05, tetrakis[methylene- β -(3,5-di-tert-butyl-4-hydroxyphenyl)propionato]methane 0.1, and I (R1-2 = tert-Bu; M = Na) (II, P 3 μm) 0.1 part was roll-kneaded at 180° for 5 min and compression-molded at 180° for 5 min to give a test piece having haze (ASTM D-1003-61) 17% and Izod impact resistance 6.4 kg-cm/cm2, vs. 48 and 4.2, resp., for the test piece without II.

IT 85209-91-2

RL: USES (Uses)

(crystalline polymers containing, with transparency and impact resistance)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 65 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:57778 HCAPLUS

DN 112:57778

TI Transparent and antiblocking stretched propylene polymer films

IN Ishibashi, Tadao; Kugimya, Yoichi; Kuroda, Takashi

PA Chisso Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	01.1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 01129050	A2	19890522	JP 1987-285262	19871113 <
	JP 07113075	B4	19951206		
PRAI GI	JP 1987-285262		19871113	<	

$$\begin{bmatrix} R^1 \\ R^2 \\ \\ R^3 \\ \\ R^4 \end{bmatrix}$$

$$\begin{bmatrix} R^1 \\ O \\ O \\ M \end{bmatrix}$$

$$\begin{bmatrix} R^1 \\ O \\ O \\ M \end{bmatrix}$$

Mono- or biaxially stretched title films, useful for packaging materials, AΒ laminates, etc., comprise propylene polymers 100, P compds. I (R = direct bond, S, alkylidene; R1, R2 = H, alkyl, cycloalkyl; M1 = metal; l, m = 0, 1; $n = valence \ of \ metal) 0.005-0.15$, (R3CO2)2M2 (R3 = C14-18 alkyl, alkenyl; M2 = Group II metal) 0.01-0.40, and cured organic resin spherical microparticles (average size ≤5 μm) 0.01-0.5 part. crystalline polypropylene 100, BHT 0.12, tetrakis[methylene 3-(2',5'-di-tert-butyl-4'-hydroxyphenyl)propionate]methane 0.12, I (R = CH2, R1 = R3 = 2-CMe3, R2 = R4 = 4-CMe3, M = Na, l = m = n = 1, average size 7.0 µm) (II) 0.01, Ca stearate (III) 0.03, and Me silsesquioxane (IV, sphericity 1.06-1.12, average size 1.6 μm) 0.04 part were blended, melt kneaded, pelletized, and extruded into a 0.9-mm sheet, which was biaxially stretched and heat set at 3% relaxation to give a 30-µm film with haze (of 4 laminated films) 3.8%, good appearance, static friction coefficient 0.35, and blocking 120 g/4 cm2, vs., 8.4, poor, 0.85, and 1100, resp., without II, III, and IV.

IT 85209-91-2

RL: USES (Uses)

(propylene polymer films containing, with good transparency and antiblocking property)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

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L87
     ANSWER 66 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     1989:555149 HCAPLUS
DN
     111:155149
     Styrene-based resin composition with short mold cycle time at
TI
     low molding temperature
     Yamasaki, Komei; Sumitomo, Takashi; Ijitsu, Toshikazu; Yamada, Hiroshi;
IN
     Furusawa, Toshihiro
PA
     Idemitsu Kosan Co., Ltd., Japan
so
     Eur. Pat. Appl., 23 pp.
     CODEN: EPXXDW
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
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ΡI
     EP 312976
                          Α2
                                 19890426
                                             EP 1988-117305
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                                 19900801
     EP 312976
                          В1
                                 19940119
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     JP 01108244
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     JP 07091427
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     FI 8903010
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                                 19890619
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     FI 97897
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     FI 97897
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                          Α
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                                 19940621
PRAI JP 1987-262628
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                                 19871020
                                           <--
     JP 1988-3843
                          A
                                 19880113
                                           <--
                                 19880205
     JP 1988-23745
                          Α
                                           <--
     WO 1988-JP1040
                          Α
                                 19881012
     EP 1988-117305
                          Α
                                 19881018
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jan delaval - 18 october 2005

US 1989-364430 B1 19890518 <--US 1991-751594 B1 19910821 <--

OS MARPAT 111:155149

AB Chem-, heat-, and solvent-resistant injection molded pieces are prepared from compns. containing 100 parts syndiotactic styrene-based polymer and 0.01-25 parts nucleating agents selected from organic acid metal salt (<50 μm), inorg. compds. (<50 μm), organophosphorus compds. (<50 μm), and ionomers. Syndiotactic polystyrene (tacticity 96%, prepared in PhMe in the presence of Me aluminoxane-cyclopentadienyltitanium trichloride catalyst) (100 parts) and 0.1 part Al p-(tert-butyl)benzoate (I) (0.5 μm) were mixed, melted at 300°, compression molded at 300°, and injection molded into test pieces having excellent mold (die 120°) release and appearance. The resin had crystallization induction time 1.1 s and 0.78 s at 80° and 150°, resp., vs. no crystallization and 5.0, resp., without I.

IT 85209-91-2

RL: USES (Uses)

(nucleating agents, for syndiotactic polystyrene moldings with low molding temps.)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 67 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1987:50459 HCAPLUS

DN 106:50459

TI Diaryl phosphate metal salts

IN Tajima, Kenji; Takahashi, Masayuki

PA Adeka Argus Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

I TIVI .	CNII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 61210090	A2	19860918	JP 1985-49712	19850313 <
	JP 05060472	B4	19930902		
PRAI	JP 1985-49712		19850313	<	
GT					

AB The title salts I and II (R, R1 = H, alkyl; M = alkali metal), useful as modifiers for plastics or as intermediates for industrial chems., are prepared by neutralization of monoacids I and II (M = H) with equimolar amts. of aqueous alkali metal hydroxides. Thus, kneading bis(4-tert-butylphenyl) phosphate 1810, NaOH 200, H2O 500, and MeOH 362 g at room temperature for 1 h gave 1910 g bis(4-tert-butylphenyl) phosphate Na salt with 99.2% purity.

IT 85209-91-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as plastic modifier)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 68 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1985:133003 HCAPLUS

DN 102:133003

TI Polyester resin compositions

PA Adeka Argus Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

ΡI	JP 59184252	A2	19841019	JP 1983-58993	19830404 <
	JP 04059344	B4	19920922		
PRAI	JP 1983-58993		19830404	<	
GI					

$$\begin{array}{c} \text{Ru-tert} \\ \text{R} \\ \text{R} \\ \text{I} \end{array}$$

Crystallization of thermoplastic polyesters is accelerated by the addition of 0.001-10% I (R,R1 = H, alkyl, aralkyl, aryl, alkylaryl; Z = direct bond, alkylidene, S; M = metal; n = valence of metal), which are compatible with polyesters for easy uniform mixing. Thus, 100 parts poly(ethylene terephthalate) [25038-59-9] and 1 part II [85209-91-2] were kneaded and pelletized to obtain a composition which showed heating and cooling crystallizing temps. 116° and 221°, resp., vs. 142° and 186°, resp., without II, and 125° and 204°, resp., using BzONa instead of II.

IT 85209-91-2

RL: USES (Uses)

(crystallization accelerators, for polyesters)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L87 ANSWER 69 OF 69 HCAPLUS COPYRIGHT 2005 ACS on STN AN 1983:144527 HCAPLUS

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DN
    98:144527
    Bis-phenol phosphates, phosphonates and phosphinates as clarifiers for
TΤ
    polyolefin resins
    Nakahara, Yutaka; Akutsu, Mitsuo; Haruna, Tohru; Takahashi,
IN
    Masayuki
    Adeka Argus Chemical Co., Ltd., Japan
PA
    Eur. Pat. Appl., 82 pp.
SO
    CODEN: EPXXDW
    Patent
DT
    English
LΑ
FAN.CNT 1
                        KIND
    PATENT NO.
                               DATE
                                           APPLICATION NO.
                                                                  DATE
                         ----
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                                _____
                                            -----
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PI
    EP 68326
                         A2
                               19830105
                                           EP 1982-105308
                                                                  19820616 <--
                               19830525
    EP 68326
                         Α3
    EP 68326
                         B1
                                19860219
        R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE
    JP 58001736
                         A2
                               19830107
                                           JP 1981-98816
                                                                  19810625 <--
                         B4
    JP 63008980
                               19880225
    US 4463113___
                         Α
                               19840731
                                           US 1982-379821
                                                                  19820520 <--
    AT 18053
                         E
                               19860315
                                           AT 1982-105308
                                                                  19820616 <--
PRAI JP 1981-98816
                         Α
                               19810625
```

19820616 <--

EP 1982-105308

GΙ

AB Bisphenol phosphates, phosphonates, and phosphinates, I, Z = C-C bond, S, alkylidene, cycloalkylidene; R, R' = C1-18 alkyl, C3-12 cycloalkyl; x = 0, 1; y = 0, 1 (at least 1 of x and y = 1) M = metal; n = valence of M, are clarifying agents for polyolefins. Thus, polypropylene [9003-07-0] 100, tetrakis [methylene-3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate] methane 0.1, dilaurylthiodipropionate 0.2 and Na 2,2'-methylenebis(4,6-di-tertbutylphenyl) cyclic phosphate [85209-91-2] 0.2 part were roll milled 5 min at 180° at 250 kg/cm2 to give specimens having haze value 42% and Izod impact strength 16.5 kg/cm/cm2. TΤ

85209-91-2

RL: USES (Uses)

(clarifying agents, for polyolefins)

Α

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

=> => d bib abs hitstr retable tot

L90 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:372921 HCAPLUS

DN 140:376032

TI Propylene diene copolymers

IN Agarwal, Pawan Kumar; Weng, Weiqing; Mehta, Aspy K.; Dekmezian, Armenag H.; Chang, Main; Chudgar, Rajan K.; Davey, Christopher R.; Lin, Chon-Yie; Richeson, Galen C.; Arjunan, Palanisamy; Georjon, Olivier Jean

PA USA

SO U.S. Pat. Appl. Publ., 40 pp., Cont.-in-part of U.S. Ser. No. 788,811, abandoned.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004087750	A1	20040506	US 2003-602177	20030624 <
	US 2001007896	A1	20010712	US 2000-734479	20001211 <
	US 2002013440	A1	20020131	US 2001-788811	20010220 <
PRAI	US 1999-458281	B2	19991210	<	
	US 2000-734479	B2	20001211	<	
	US 2001-788811	B2	20010220	<	
	WO 2000-US33612	A2	20001211		

AB The copolymn. reaction of ≥ 1 olefin monomers, such as propylene, with α, ω -diene units and the resulting copolymers are provided. The copolymer may have 90-99.999% olefins and 0.001-2.000% α, ω -dienes. The copolymer may have weight average mol. weight 50,000-2,000,000, crystallization temperature 115-135°, and melt flow rate 0.1-100 dg/min. These copolymers may be employed in a wide variety of applications, the articles of which include, for example, films, fibers, such as spunbonded and melt-blown fibers, fabrics, such as nonwoven fabrics, and molded articles. The copolymer may further include at least two crystalline populations. The m.p. range of one of the crystalline populations

is distinguishable from the m.p. range of another crystalline population by $1-8^{\circ}$. One of the crystalline populations has m.p. $152-158^{\circ}$ and another crystalline population has m.p. $142-148^{\circ}$. Thus, 0.5 mL 1 M

triethylaminium, 0.25 mL 1,9-decadiene, and 30 mmol hydrogen were fed into a reactor, 1 L propylene was added therein, 200 mg a catalyst comprising dimethylsilylbis(2-methyl-4-phenyl-indenyl)zirconium dichloride and methylaluminoxane and 200 cc propylene were added therein and polymerized to give a copolymer (yield 260 g) with melt flow rate 26 dg/min, Mn 19,000, Mw 167,000, m.p. 153.3°, crystallization temperature 122.6°, and recoverable compliance 1.86 + 10-4 cm2/dyne, which was mixed with 750 ppm Irganox 1010 and 250 ppm calcium stearate and injection-molded to give a test piece with tensile strength 5710 psi, 1% secant flexural modulus 311 kpsi, and heat distortion temperature 129°.

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); USES (Uses)

(nucleating agent; preparation of propylene diene copolymers)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L90 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:450939 HCAPLUS

DN 135:46629

TI Manufacture of propylene-ethylene block copolymers and their compositions for blow-molded articles

IN Tanaka, Kenji; Sugita, Yasuhisa; Nakagawa, Masaru; Nakamura, Tetsuya

PA Idemitsu Petrochemical Co. Ltd., Japan

SO Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

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	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
P	I EP 1108733	A1 20010620	EP 2000-125626	20001123 <
	R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
	IE, SI, LT,	LV, FI, RO		
	TW 593374	B 20040621	TW 2000-89124565	20001120 <
	US 6313.227	B1 2.0.011106	US 2000-722005	20001127 <
	JP 2001233923	A2 20010828	JP 2000-368583	20001204 <
	CA 2328209	AA 20010617	CA 2000-2328209	20001214 <
	CN 1300787	A 20010627	CN 2000-135977	20001215 <
P	RAI JP 1999-359430	A 19991217	<	

AB The block copolymers, having MFR 0.01-1.0 g/10 min and with good heat, drawdown and impact resistance, and high rigidity, contain: (A) 85-97% xylene-insol. fraction at 25°, and (B) 3-15% xylene-soluble fraction at 25°, wherein A has stereospecificity index ≥98.0%, intrinsic viscosity [η] 2.5-5.5 dL/g, and a Mw which satisfy a relation with the content of fraction having a mol. weight ≤104.5 (S) as S≤ -5.3 + 10-6Mw + 7.58, and B has ethylene unit 30-70%, intrinsic viscosity [η] 2.5-9.0 dL/g. The copolymers are prepared by multi-stage polymerization and the blow-molded articles therefrom are useful

for

bumpers in automobiles.

IT 85209-91-2, Adekastab NA 11

RL: MOA (Modifier or additive use); USES (Uses)

(crystal nucleating agents, ADK Stab NA 11; compns. of propylene-ethylene block copolymers for blow-molded articles)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-

dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

KEIADLE					
Referenced Author	Year	VOL	PG	Referenced Work	Referenced
(RAU)	(RPY)	(RVL)	(RPG)	(RWK)	File
	+====	+=====	+======	+============	+========
Anon	1981	005	C-058	PATENT ABSTRACTS OF	
Anon	1986	010	C-383	PATENT ABSTRACTS OF	
Anon	1999	1999		PATENT ABSTRACTS OF	İ
Anon '	2000	2000	İ	PATENT ABSTRACTS OF	
Anon	2000	2000		PATENT ABSTRACTS OF	
Anon	2000	2000		PATENT ABSTRACTS OF	İ
Idemitsu Petrochem Co L	1981			JP 56032516 A	HCAPLUS
Idemitsu Petrochem Co L	1986			JP 61136546 A	HCAPLUS
Idemitsu Petrochem Co L	1999			JP 11130809 A	HCAPLUS
Idemitsu Petrochem Co L	1999			JP 11279369 A	HCAPLUS
Idemitsu Petrochem Co L	2000			JP 2000007853 A	HCAPLUS
Idemitsu Petrochem Co L	2000			JP 2000119480 A	HCAPLUS
Idemitsu Petrochemical	1999			WO 9965965 A	HCAPLUS
Idemitsu Petrochemical	2000			WO 0060004 A	
Kasahara, T	1986			US 4565844 A	HCAPLUS
Sumitomo Chemical Co	1997			WO 9738033 A	HCAPLUS

L90 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

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2000:715629 HCAPLUS
AN
DN
     133:282760
     Propylene-ethylene block copolymer compositions for automotive exterior
ΤI
     parts
     Kobayashi, Yutaka; Tanaka, Kenji; Saeki, Yoshihisa
IN
     Idemitsu Petrochemical Co., Ltd., Japan; Honda Motor Co., Ltd.
PA
     Jpn. Kokai Tokkyo Koho, 8 pp.
SO
     CODEN: JKXXAF
     Patent
DT
     Japanese
LΑ
FAN.CNT 1
                        KIND
                                            APPLICATION NO.
     PATENT NO.
                                DATE
                                                                   DATE
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                         - - - -
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                                20001010
                                            JP 1999-91644
                                                                   19990331 <--
PΙ
     JP 2000281735
                         A2
     WO 2000060004
                         A1
                                20001012
                                            WO 2000-JP1949
                                                                   20000329 <--
        W: US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
                                20010411
                                            EP 2000-912913
                                                                   20000329 <--
     EP 1090957
                         A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     US 6818690
                          B1
                                20041116
                                           US 2000-701376
                                                                   20001130 <--
PRAI JP 1999-91644
                                19990331 <--
                         Α
     WO 2000-JP1949
                         W
                                20000329
AB
     The compns. comprise 300-2000 ppm methylenebis(2,4-di-tert-butylphenol)
     phosphate sodium salt and propylene-ethylene block copolymer (I) with melt
     flow rate (MFR; 230°, 2.16 kg-load) 10-18 g/10 min,
     stereoregularity index mmmm fraction of xylene-insol. components
     ≥98.9%, and xylene-soluble content 22-28%, where ethylene content (x;
     %) in the xylene-soluble components and xylene-soluble T1 relaxation time (y;
     ms, measured by pulse NMR, single component) satisfy the relationship of y
     \leq 0.0014x3 - 0.0897x2 - 1.0593x + 231.6. Thus,
     Ziegler-Natta-catalyzed I (mmmm fraction 99.1%, MFR 12.7 q/10 min,
     xylene-soluble content 22.0%, y 146 ms) was kneaded with 1200 ppm nucleating
     agent (ADK Stab NA 11) and other additives and injection-molded to give a
     test piece, showing flexural modulus 1150 MPa, Izod impact strength 6.5
     kJ/m2 at -30°, and tensile elongation ≥500%.
IT
     85209-91-2, ADK Stab NA 11
     RL: MOA (Modifier or additive use); USES (Uses)
        (nucleating agent; propylene-ethylene block copolymer compns. for
        automotive exterior parts)
     85209-91-2 HCAPLUS
RN
     12H-Dibenzo [d, q] [1,3,2] dioxaphosphocin, 2,4,8,10-tetrakis (1,1-
CN
     dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)
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Na

JP 1997-251689

JP 1997-273577

WO 1998-JP3597

MARPAT 130:169030

OS

Α

Α

W

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ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
L90
AN
     1999:126936 HCAPLUS
DN
     130:169030
     Manufacturing olefin (co)polymers with controlled molecular weight
ΤI
IN
     Ushioda, Tsutomu; Saito, Jun; Tsutsui, Mototake; Yasuda, Yoshitoyo;
     Fujita, Hiroyuki; Uwai, Toshihiro; Ohgi, Yoshiyuki; Adachi, Minoru;
     Morimoto, Yoshitaka; Hirose, Taketo; Kugimiya, Youichi; Taniguchi,
     Masahiko; Kuramochi, Hitoshi
PA
     Chisso Corporation, Japan
SO
     PCT Int. Appl., 88 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
     ______
                         _ _ _ _
                                -----
                                            -----
     WO 9907747
                                19990218
                                           WO 1998-JP3597
PI
                         A1
                                                                   19980812 <--
            AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
             NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
             UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9886478
                          A1
                                19990301
                                           AU 1998-86478
                                                                   19980812 <--
     DE 19882607
                          Т
                                20000727
                                           DE 1998-19882607
                                                                   19980812 <--
     TW 434267
                          В
                                20010516
                                            TW 1998-87113276
                                                                   19980812 <--
     US 6410662
                         В1
                                20020625
                                           US 2000-485492
                                                                   20000211 <--
PRAI JP 1997-217899
                                19970812
                         Α
                                         <---
     JP 1997-218756
                         Α
                                19970813
                                          <--
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AB Olefin (co)polymers with controlled mol. weight from 30,000 to 10,000,000 and excellent rigidity, heat resistance and transparence, usable for various industrial parts, containers, films, sheets, fibers are manufactured by use of specific catalysts and selecting polymerization time. Thus, a catalyst 100 g from dimethylsilyl(2,3,5-trimethylcyclopentadienyl)(2',4',5'-

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19970917

19970919

19980812

trimethylcyclopentadienyl)zirconium dichloride 0.39 g, methylaluminoxane 267 mmol and silica 10 g was mixed with n-hexane 80 mL, trimethylaluminum 0.5 mmol and propylene was supplied and polymerized to give a polypropylene powder 15.5 g, showing MFR 93 g/10 min., mol. weight 86917, Mw/Mn 2.5.

IT 85209-91-2, Sodium 2,2'-methylene-bis-(4,6-di-tert-

butylphenyl)phosphate

RL: MOA (Modifier or additive use); USES (Uses)

(crystal nucleating agent; manufacturing olefin polymers with controlled

mol.

weight)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

RETABLE

Referenced Author (RAU)	Year VOL (RPY) (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
=======================================	+=====+=====	+=====+=		+========
Anon		U	JS 5629254 A	HCAPLUS
Anon		U	JS 5658997 A	HCAPLUS
Anon		ט	JS 5705584 A	HCAPLUS
Anon		ט ט	JS 5710223 A	HCAPLUS
Anon		U	JS 5723640 A	HCAPLUS
Anon		E	EP 629632 A2	HCAPLUS
Chisso Corp	1997]	JP 09-048040 A	HCAPLUS
Chisso Corp	1997	J	IP 09-048858 A	HCAPLUS
Chisso Corp	1997	J	JP 09-110934 A	HCAPLUS
Chisso Corp	1997	J	JP 09-151214 A	HCAPLUS
Mitsui Petrochemical In	1995	J	JP 07-149833 A	HCAPLUS
Mitsui Petrochemical In	1996	J	JP 08-073532 A	HCAPLUS

L90 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:111757 HCAPLUS

DN 130:154435

TI Method of improving crystallization rate and temperature of syndiotactic polypropylene

IN Reddy, Baireddy Raghava; Kim, Sehyun; Shamshoum, Edwar S.

PA Fina Technology, Inc., USA; Atofina Research

SO Eur. Pat. Appl., 16 pp. CODEN: EPXXDW

DT Patent

LΑ	Eng	Jlish
FAN.	CNT	1

PAT	ENT NO.			KINI)	DATE		API	PLICA	TION	NO.		D.	ATE		
	· -				-								-			
ΕP	896022			A1		1999	0210	EP	1998	-1147	96		1	9980	806	<
ΕP	896022			B1		2004	0929									
	R: AT,	BE,	CH,	DE,	DK,	, ES,	FR,	GB, GI	R, IT	, LI,	LU,	NL,	SE,	MC,	PT,	
	IE,	SI,	LT,	LV,	FI,	, RO										
US	5969021			Α		1999	1019	US	1997	-9109	74		1	9970	807	<
TW	418213			В		2001	0111	TW	1998	-8711	2335		1	9980'	728	<
JР	11228707			A2		1999	0824	JP	1998	-2285	52		1	9980	730	<
AT	277967			E		2004	1015	AT	1998	-1147	96		1	9980	806	<
ES	2227748			Т3		2005	0401	ES	1998	-1147	96		1	9980	306	<
CN	1209445			Α		1999	0303	CN	1998	-1162	55		1	9980	307	<
CN	1122069			В		2003	0924									
US	1997-9109	974		Α		1997	0807	<								
	EP EP US TW JP AT ES CN	IE, US 5969021 TW 418213 JP 11228707 AT 277967 ES 2227748 CN 1209445 CN 1122069	EP 896022 EP 896022 R: AT, BE, IE, SI, US 5969021 TW 418213 JP 11228707 AT 277967 ES 2227748 CN 1209445 CN 1122069	EP 896022 EP 896022 R: AT, BE, CH, IE, SI, LT, US 5969021 TW 418213 JP 11228707 AT 277967 ES 2227748 CN 1209445 CN 1122069	EP 896022 A1 EP 896022 B1 R: AT, BE, CH, DE, IE, SI, LT, LV, US 5969021 A TW 418213 B JP 11228707 A2 AT 277967 E ES 2227748 T3 CN 122069 B	EP 896022 A1 EP 896022 B1 R: AT, BE, CH, DE, DK, IE, SI, LT, LV, FI, US 5969021 A TW 418213 B JP 11228707 A2 AT 277967 E ES 2227748 T3 CN 1209445 A CN 1122069 B	EP 896022 A1 1999 EP 896022 B1 2004 R: AT, BE, CH, DE, DK, ES,	EP 896022 A1 19990210 EP 896022 B1 20040929 R: AT, BE, CH, DE, DK, ES, FR,	EP 896022 A1 19990210 EP EP 896022 B1 20040929 R: AT, BE, CH, DE, DK, ES, FR, GB, GI IE, SI, LT, LV, FI, RO US 5969021 A 19991019 US TW 418213 B 20010111 TW JP 11228707 A2 19990824 JP AT 277967 E 20041015 AT ES 2227748 T3 20050401 ES CN 1209445 A 19990303 CN CN 1122069 B 20030924	EP 896022 A1 19990210 EP 1998 EP 896022 B1 20040929 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT IE, SI, LT, LV, FI, RO US 5969021 A 19991019 US 1997 TW 418213 B 20010111 TW 1998 JP 11228707 A2 19990824 JP 1998 AT 277967 E 20041015 AT 1998 ES 2227748 T3 20050401 ES 1998 CN 122069 B 20030924	EP 896022 A1 19990210 EP 1998-1147 EP 896022 B1 20040929 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI,	EP 896022 B1 20040929 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU,	EP 896022	EP 896022 B1 20040929 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, IE, SI, LT, LV, FI, RO US 5969021 A 19991019 US 1997-910974 1: TW 418213 B 20010111 TW 1998-87112335 1: JP 11228707 A2 19990824 JP 1998-228552 1: AT 277967 E 20041015 AT 1998-114796 1: ES 2227748 T3 20050401 ES 1998-114796 1: CN 1209445 A 19990303 CN 1998-116255 1: CN 1122069 B 20030924	EP 896022	EP 896022 Al 19990210 EP 1998-114796 19980806 EP 896022 Bl 20040929 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

AB The title method comprises adding at least one of polytetrafluoroethylene, sodium 2,2-methylene-bis(4,6,di-tert-butylphenyl)phosphate, pimelic acid, and calcium pimelate, and compns. and products made thereby.

IT 85209-91-2, Sodium 2,2'-methylene bis(4,6-di-tert-

butylphenyl)phosphate

RL: MOA (Modifier or additive use); USES (Uses)

(method of improving crystallization rate and temperature of syndiotactic polypropylene)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

RETABLE

Referenced Author (RAU)	, ,,,,	PG	K)	Referenced File
Buckmaster Mitsui Toatsu	1997 1991 1996	US 568845 EP 041967	7 A H	CAPLUS CAPLUS
Mitsui Toatsu Chem Inc Pcd	1995	JP 082179 DE 442099		CAPLUS CAPLUS

L90 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:34591 HCAPLUS

DN 130:140231

TI Propylene-type polymer composition with balanced heat sealability and

rigidity and food packaging film therefrom

IN Minami, Miroshi; Motegi, Yasuhiro; Okamoto, Takuji; Ohta, Takeshi; Funabashi, Hideo

PA Idemitsu Petrochemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent LA Japanese FAN.CNT 4

	PATENT NO.			KIND .		DATE			APPLICATION NO.						DATE			
ΡI	JP	JP 11001584					-	1999	0106	JP	1997-	22263	 34		199	 9708	 19	<
	WO	9909	098			A1		1999	0225	WO	1998-	JP364	15		199	9808	17	<
		W:	CN,	KR,	US													
		RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI, F	R, GB,	GR,	ΙE,	IT,	LU, N	MC,	NL,	
			PT,	SE														
	ΕP	1006	149			A1		2000	0607	EP	1998-	93784	11		199	9808	17	<
		R:	BE,	DE,	FR,	GB,	ΙT,	NL										
	TW	5611	60			В		2003	1111	TW	1998-	87113	3500		199	9808	17	<
	US	6562	886			В1		2003	0513	US	2000-	46398	39		200	0004	27	<
PRAI	JP	1997	-987 :	r 9		Α		1997	0416	<								
	JP	1997	-2226	534		Α		1997	0819	<								
	JР	1997	-2306	511		A		1997	0827	<								
	JP	1998	-3996	50		Α		1998	0223	<								
	JР	1998	-549	57		Α		1998	0306	<								
	JР	1998	-549	58		Α		1998	0306	<								
	JΡ	1998	-959:	31		Α		1998	0408	<								
	WO	1998	-JP36	545		W		1998	0817	<								

The composition comprises (A) metallocene catalyst-polymerized propylene-type polymers (isotactic pentad ratio 80-99%) or propylene-ethylene and/or C4-20 α-olefin copolymers with polydispersity ≤3.5, and limiting viscosity 0.5-5.0 dL/g and (B) ≥10 ppm nucleating agents. Preparing a polypropylene (viscosity 1.5 dL/g, polydispersity 1.9) using (1,2'-ethylene) (2,1'-ethylene)-bis(indenyl)hafnium dichloride catalyst, melt extruding with IRG 1010 750, IRG 168 750, Ca stearate 500, dimethylbenzylidene sorbitol (nucleating agent) 100, erucic acid amide 1000, and silica-type antiblocking agent 1800 ppm, extruding through a T-die and ageing for 24 h at 40° gave a film with flexural modulus 1.1 x 103 MPa, heat sealing temperature 131°, and impact strength 3.2 J/m.

IT 85209-91-2, NA 11

RL: MOA (Modifier or additive use); USES (Uses)
(nucleating agent; propylene-type polymer composition with balanced heat sealability and rigidity and food packaging film therefrom)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

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Na
    ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
L90
     1998/768118 HCAPLUS
AN
     130:39591
DN
     Polypropylene-based compositions for transparent moldings with good impact
TI
     and whitening resistances
     Okayama, Chikashi; Nakajima, Takanori; Akitaya, Shinichi; Sumi, Yoshitaka
IN
PA
     Chisso Corp., Japan
SO
     Jpn. Kokai Tokkyo Koho, 12 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 2
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
```

ΡI	JP 10316727	A2	19981202	JP 1997-132177	19970522 <
	TW 400341	В	20000801	TW 1998-87107312	19980512 <
	EP 885926	A2	19981223	EP 1998-108923	19980515 <
	EP 885926	A3	19990519		
	EP 885926	B1	20010321		
	R: AT, BE,	CH, DE, DI	K, ES, FR,	GB, GR, IT, LI, LU, NI	, SE, MC, PT,
		LT, LV, F			
	US 6319991	B1	20011120	US 1998-81678	19980520 <
	CN -120 0382	Α	19981202	CN 1998-108334	19980521 <
	CN 1130420	В	20031210		
PRAI	JP 1997-132176	Α	19970522	<	
	JP 1997-132177	Α	19970522	<	
AB	Title compns. co	mprise 99-	-99.9999% p	olymer blends of (A) p	ropylene
				ntent 90-99%) and (B)	
	$I-\alpha$ -olefin rando	om copolyme	ers [I cont	ent 55-90%; intrinsic	viscosity
	[[η]B 1.3-3.5 dI				1
	$[[\eta]B/[\eta]A] + (W$				
				, B, resp.]]] and 0.00	01-1%
				a composition containi	
				5:75 ÎI-I copolymer [
	$[\eta]B/[\eta]A = 1.0;$				
				ylphenyl) phosphate 0.	3,
				butyl-4'-hydroxyphenyl	
	_			ate 0.1 part was pelle	-
				-1	

injection molded to give a specimen showing flexural modulus 650 MPa, haze

20%, Izod impact strength 40 and 5.5 at 0° and at -20°,

resp., and good impact whitening resistance.

IT 85209-91-2, Sodium 2,2'-methylene-bis(4,6-di-tert-butylphenyl) phosphate

RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

 $(\alpha\text{-crystal nucleating agent; propylene-based polymer compns.}$ containing nucleating agents for moldings with good impact-whitening resistance)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

1997:443357 HCAPLUS

DN 127:51579

TI Propylene polymer compositions, manufacture thereof, polypropylene compositions containing the same, molded articles therefrom, manufacture thereof

IN Okayama, Chikashi; Nakashima, Takanori; Kimura, Masami; Wakata, Mayumi; Kimura, Kazuhiro; Yamamoto, Toshiki; Ishii, Hirohisa; Sugimoto, Masataka; Gouda, Kunio; Mochizuki, Yasuhiro; Saito, Noriaki; Yokota, Junichiro; Kawano, Shouji; Nakagawa, Yasuhiko

PA Japan

SO PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

LAM.	FAN.CNI I																		
	PATENT NO.					KIND DATE			APPLICATION NO.						DATE				
ΡI	WO	9719	135			A1		1997	0529	1	WO 1	996-	JP34:	33		1:	9961	122 <	-
		W:	AL,	AU,	BB,	BG,	BR,	CA,	CN,	CZ,	EE,	GE,	ΗU,	ΙL,	IS,	JP,	KR,	LK,	
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			UA,	US,	UΖ,	VN,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM				
		RW:	KE,	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,	
			MR,	ΝE,	SN,	TD,	TG												
	TW	4865	01			В		2002	0511		rw 1	996-	8511	4348		1:	9961	121 <	-
	ΑU	9676	387			A1		1997	0611	7	AU 1	996-	7638'	7		19	9961:	122 <	-
	EΡ	8631	83			A1		1998	0909]	EP 1:	996-:	9393	02		1:	9961	122 <	-

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20020403
     EP 863183
                          B1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
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                          Α
                                19990120
                                            CN 1996-199321
                                                                    19961122 <--
     CN 1109715
                          В
                                20030528
                          Α
                                19990713
                                            BR 1996-11825
                                                                    19961122 <--
     BR 9611825
                          E
                                            AT 1996-939302
                                20020415
                                                                    19961122 <--
    AT 215571
                          A2
                                20020906
                                            JP 2001-353858
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     JP 2002249626
                          A2
                                20030905
                                            JP 2003-17213
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     JP 2003246900
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                                20031125
                                            JP 1997-519600
                                                                    19961122 <--
                          B1
                                20011009
                                            US 1998-68949
                                                                    19980814 <--
    US 6300415
PRAI JP 1995-305292
                          Α
                                19951124
                                          <--
     JP 1996-35639
                          Α
                                19960129
                                          <--
                          Α
     JP 1996-106365
                                19960402 <--
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     JP 1996-174178
                                19960613
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                                19960621
     JP 1996-181141
                                          <--
                          Α
     JP 1996-209030
                                19960718
                                          <--
     JP 1996-209031
                          Α
                                19960718 <--
     JP 1997-519600
                          A3
                                19961122 <--
    WO 1996-JP3433
                          W
                                19961122 <--
     The propylene polymer compns. comprise a propylene homopolymer (intrinsic
AB
     viscosity [\eta]PP) and a propylene/ethylene copolymer with intrinsic
     viscosity ([\eta]RC) 1.7-2.8 dL/g at [\eta]RC/[\eta]PP ratio 0.7-1.2,
     and the product of the homopolymer to copolymer weight ratio (WPP/WRC) and
     the intrinsic viscosity ratio thereof, (WPP/WRC)+([\eta]RC/[\eta]P
     P), being 1.0-3.0. Such compns are used for making various molded
     articles such as sheets, films, laminated films, hollow moldings, etc.,
     having well-balanced properties among moldability, molding shrinkage,
     rigidity, flexibility, impact resistance particularly at low temps.,
     transparency, gloss and blushing resistance. In the presence of
     stereospecific olefin polymerization catalysts, propylene is homopolymd. to
form
     60-78% of target production, then propylene is further polymerized together
with
     ethylene to form a copolymer of ethylene content 25-55% to obtain
     propylene polymer compns. The compns. obtained are mixed with
     antioxidants and calcium stearate, pelletized, and injection molded.
     85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl)
TT
     phosphate
     RL: MOA (Modifier or additive use); USES (Uses)
        (propylene polymer compns. for moldings with well-balanced performance
        properties)
RN
     85209-91-2 HCAPLUS
     12H-Dibenzo [d, g] [1,3,2] dioxaphosphocin, 2,4,8,10-tetrakis(1,1-
CN
```

dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L90 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:433422 HCAPLUS

DN 127:52152

TI Crimped conjugate fibers containing a nucleating agent

IN Pike, Richard Daniel

PA Kimberly-Clark Corporation, USA

SO Can. Pat. Appl., 23 pp.

CODEN: CPXXEB

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	CA 2184626	AA	19970301	CA 1996-2184626	19960830 <
	US 62039 05	B1	20010320	US 1995-522479	19950830 <
	US 5811045	Α	19980922	US 1997-806159	19970225 <
PRA	T US 1995-522479	A	19950830	<	

AB A helically crimped conjugate fiber comprises at least a first composition and a second composition. The first and second compns. contain different thermoplastic polymers having different solidification periods, and at least one of the two compns. contains a nucleating agent. The level of crimps in the conjugate fiber can be controlled, and the fibers are useful in nonwoven fabrics. A fiber was prepared from Aspun 6811A containing TiO2 and PD3445 containing TiO2 and NA-11 nucleating agent.

IT 85209-91-2, ADK Stab NA 11

RL: MOA (Modifier or additive use); USES (Uses)

(crimped conjugate fibers containing a nucleating agent)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L90 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:278925 HCAPLUS

DN 126:251596

TI Propylene-ethylene copolymer compositions and process for their production

IN Hayashida, Teruaki; Gima, Shinei; Hatada, Kouichi; Kojima, Osamu; Shimizu, Ken; Nakajima, Hirokazu; Nomura, Takao; Kanome, Yoshihiro; et al.

PA Chisso Corp., Japan; Toyota Jidosha Kabushiki Kaisha

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.				KIND DATE			APPLICATION NO.						DATE					
ΡI	WO	9708	218			A1 19970306			1	WO 1	 996-	JP24	 49		1:	9960	830	<	
		W:	AL,		-	-	-		-										
			LK,	LR,	LT,	LV,	MG,	MK,	MN,	MX,	NO,	NZ,	PL,	RO,	SG,	SI,	SK,	TR,	
			TT,	UA,	US,	UZ,	VN,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM			
		RW:	KΕ,	LS,	MW,	SD,	SZ,	ŪĠ,	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	
			MR,	ΝE,	SN,	TD,	TG												
	CA	2203	876			AA		1997	0306	-	CA 1	996-	2203	876		1:	9960	830	<
	ΑU	9668	382			A1		1997	0319		AU 1	996-	6838	2		1	9960	830	<
	ΑU	7179	90			B2		2000	0406										
	ΕP	7902	62			A1		1997	0820	;	EP 1	996-	9287	13		1:	9960	830	<
	ΕP	7902	62			В1		2000	0510										
		R:	BE,	DE,	FR,	GB,	ΙT,	NL											
	CN	1169	743			Α		1998	0107		CN 1	996-	1911	63		1:	9960	830	<
	CN	1119	364			В		2003	0827										
	JP	3231	332			B2		2001	1119			997-					9960	830	<
	TW	4169	62			В		2001	0101	•	TW 1	996-	8511	1469		. 19	9960	919	<
	US	6005	سىدو			Α		1999	1221	1	US 1	997-	8178	50		1:	9970	430	<
PRAI	JР	1995	-248	775		Α		1995	0831	<-	-								
	JР	1996	-1192	298		Α		1996	0514	< -	-								
	JР	1996	-120	011		Α		1996	0515	<-	-								
	JP	1996	-120	012		Α		1996	0515	<-	_								
	WO	1996	-JP24	449		W		1996	0830	<-	-								
os	MAI	RPAT	126:2	2515	96														

AB A propylene-ethylene copolymer (I) composition (melt flow rate 10-300 g/10 min) is prepared by a two-stage process. In the first stage (I) propylene is

polymerized in the presence of a stereoregular polymerization catalyst and H to produce 60-95% (based on total I) of a propylene polymer with melt flow rate 100-1000 g/10 min and a ratio (Cf; the amount of the propylene polymer which dissolves in o-dichlorobenzene at a temperature <112° to the amount dissolved at temperature $\geq 112^\circ$; determined by measuring the amts. dissolved while raising the temperature of o-dichlorobenzene continuously or stepwise) of ≤ 0.5 , the ratio (Cf) being an indication of the intramol. stereoregularity and mol. weight distribution of the polymer. In the second stage (II) propylene and ethylene are added to the propylene polymer produced in step (I) in such amts. that the ethylene content is 30-80% and then polymerized to produce 5-40% (based on the whole polymer) of an ethylene-propylene copolymer. The compns. have good moldability and balanced rigidity, tenacity, impact resistance, etc. The propylene-ethylene copolymer composition optionally comprises α -crystal and/or β -crystal nucleating agent.

IT 85209-91-2

RL: MOA (Modifier or additive use); USES (Uses)

(crystal nucleation agent; propylene-ethylene copolymer compns. and process for their production)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

L90 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:123898 HCAPLUS

DN 114:123898

TI Nucleating agents for syndiotactic polypropylene

IN Asanuma, Tadashi; Shiomura, Tetsunosuke; Uchikawa, Nobutaka; Sasaki, Tateyo; Inoue, Takeo

PA Mitsui Toatsu Chemicals, Inc., Japan

SO PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 3

PΙ

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9012843 A1 19901101 WO 1990-JP484 19900410 <--

W: CA, KR, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE

stiffness

6100 kg/cm2, elongation 517%, notched Izod impact strength 14.2 kg-cm/cm, and crystallization temperature 105.4°; vs. 4700, 740, 14.1, and 96.8, resp., without talc.

IT 85209-91-2

RL: USES (Uses)

(nucleating agents, for syndiotactic polypropylene)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo [d,q] [1,3,2] dioxaphosphocin, 2,4,8,10-tetrakis (1,1dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN L90

AN 1989:76726 HCAPLUS

DN 110:76726

ΤI Glass fiber-reinforced polypropylene-poly-1-butene blends

IN Nomura, Manabu; Mizuno, Hirohide; Wada, Kaoru

PA Idemitsu Petrochemical Co., Ltd., Japan

SO Eur. Pat. Appl., 18 pp. CODEN: EPXXDW

DT Patent

English LΑ

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO.

DATE

jan delaval - 18 october 2005

ΡI	EP 278409	A2	19880817	EP 1988-101647	19880204 <
	EP 278409	A 3	19900328		
	EP 278409	B1	19930915		
	R: DE, GB				
	JP 63193944	A2	19880811	JP 1987-26911	19870207 <
	JP 08026192	B4	19960313		
	JP 01090238	A2 .	19890406	JP 1987-248685	19870930 <
	JP 08013911	B4	19960214		
	CA 1318425	A1	19930525	CA 1988-558397	19880205 <
	US 5030682	Α	19910709	US 1989-387447	19890731 <
PRAI	JP 1987-26911	Α	19870207	<	
	JP 1987-248685	Α	19870930	<	
	US 1988-153639	B1	19880205	<	

AB Compns. with good processability to smooth, colorless moldings with good impact strength, stiffness, heat-distortion temperature, and hardness contain 15-80% C3H6 polymers, 20-60% poly-1-butene (I), 5-60% glass fibers, and optionally modified polyolefins or crystal nucleating agents. A smooth, colorless molding containing a blend of polypropylene with C2H4-C3H6 copolymer (6% C2H4) 35, I 35, and glass fibers 30 parts had flexural strength 628 kg/cm2, Izod impact strength 14 kg-cm/cm, and heat-distortion temperature 124°; vs. 680, 6.8, and 132, resp. (with an extremely rough surface and distinct color) without I.

IT 85209-91-2

RL: USES (Uses)

(crystal nucleating agents, for glass fiber-reinforced polyolefin blends)

RN 85209-91-2 HCAPLUS

CN 12H-Dibenzo[d,g][1,3,2]dioxaphosphocin, 2,4,8,10-tetrakis(1,1-dimethylethyl)-6-hydroxy-, 6-oxide, sodium salt (9CI) (CA INDEX NAME)

Na

=> d his

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                E TAKAHASHI M/AU
           2069 S E3-E7, E128-E130
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             5 S L13-L18 AND L58
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            232 S L60-L63
L64
            143 S L64 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
L65
L66
            34 S L65 AND RESIN?
L67
            137 S L65 AND PLASTIC?/SC,SX
L68
             49 S L65 AND PLASTIC?/CW,CT
             34 S L66 AND L67, L68
L69
     FILE 'REGISTRY' ENTERED AT 14:14:37 ON 18 OCT 2005
L70
             37 S L50, L53, L54, L55 AND NA/ELS
L71
              6 S L70 AND C29H43O4P
     FILE 'HCAPLUS' ENTERED AT 14:15:08 ON 18 OCT 2005
L72
            412 S L71
L73
            286 S L72 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
L74
             62 S L73 AND RESIN?
L75
            244 S L73 AND PLASTIC?/SC,SX,CW,CT
L76
            59 S L74 AND L75
L77
             67 S L1-L12 AND L72
L78
            48 S L77 AND L73
L79
            42 S L78 AND L74-L76
L80
            88 S L76,L79
            85 S L80 AND P/DT
L81
L82
            11 S L81 AND US/PC, PRC, AC
L83
             59 S L80 AND L74
L84
             59 S L83 AND P/DT
L85
             10 S L84 AND US/PC, PRC, AC
L86
             15 S L1-L11 AND L73
L87
             69 S L76, L86
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FILE 'REGISTRY' ENTERED AT 14:20:03 ON 18 OCT 2005

FILE 'HCAPLUS' ENTERED AT 14:20:49 ON 18 OCT 2005

L88 91 S L73 AND L13-L18 NOT L87

L89 88 S L88 AND P/DT

L90 12 S L89 AND US/PC, PRC, AC

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